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ABSTRACT

The report analyzes the influence of shifting enrollment patterns on the public school system. The research was undertaken in response to a request by the House Committee on Education and Labor for background material related to the Elementary and Secondary School Act. The report is presented in 12 major sections. Section I defines demography (the branch of the social sciences which deals with the determinants and consequences of population change), describes the format of the report, and presents summary observations. Section II explains the effect of birth and fertility rates on demographic trends and draws general implications of population projections for school enrollment trends. Sections III through XI present and interpret data relating to changing family patterns, working women, immigration, mobility, enrollment, responses to declining enrollment, teacher shortages, schools and students, private school enrollment, and effects of age decline at the onset of puberty. The final section describes interaction of non-demographic variables such as energy and changes in work patterns with demography. Major predictions are that enrollment of elementary school children is likely to continue to decline through mid-1980s, and that the size of the high school population of 1990 will be about 25% smaller than in 1975. It was concluded that although reliable short term predictions can be made for the nation as a whole about the number of children entering the school system, national predictions may not be relevant to state and local planners due to internal migration. (Author/DB)

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A PRELIMINARY ANALYSIS OF
DEMOGRAPHIC TRENDS INFLUENCING
THE ELEMENTARY AND SECONDARY SCHOOL SYSTEM

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UNITED STATES CONGRESS
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MAY 1977

PREFACE

Representative Carl D. Perkins, Chairman of the House Committee on Education and Labor, in a letter of March 17, 1977 (appended) requested OTA assistance for the Subcommittee on Elementary, Secondary and Vocational Education through the preparation of a paper on demographic trends in relation to elementary and secondary education.

The Chairman requested that OTA "...submit a report including... findings and supportive data to the Subcommittee by the third week of April. It is my hope that the Subcommittee might be able to use this paper as the basis for foresight hearings on demographic trends in elementary and secondary education." This request was a follow-through to a preliminary planning paper, which consisted of an inventory of issues and trends in relation to elementary and secondary education with two brief cases illustrating how trends and issues can interact in a policy interesting way. One of the examples concerned demographic influences on elementary and secondary education. In order to put something useful into the hands of the Committee to help determine whether a full assessment by OTA could be usefully devoted to the subject, an exploratory task was conducted resulting in this further document. It is an expansion and extension of the previous preliminary paper mentioned above, "Trends and Issues Influencing Elementary and Secondary Education," dated December 29, 1971.

In order to proceed with this activity, an interagency supporting task force was organized with representatives from the Bureau of the Census, the U. S. Department of Agriculture, the National Institute of Education, and the National Center for Education Statistics. The task force was to assist OTA in the collection and organization of information and data for this exploratory task.

The second major element in meeting the objective was a two-day planning workshop. It involved members of the interagency task force as well as external specialists in demography and elementary and secondary education, and user representatives. Potentially impacted parties were also invited to participate. A House Committee staff member and a staff member from the Senate Subcommittee on Education, Art, and Humanities participated in a portion of the workshop. Specifically, the workshop was designed to identify:

- Significant trends
- Extant demographic data and projection
- New trend data and information needed
- Factors interacting with or changing trends
- Implications of the demographic trends for:
    - a) The Committee
    - b) Federal Agencies
    - c) State and Local Agencies
- Policy issues

As a conceptual framework around which the workshop, task force and paper are constructed, a time perspective of twenty years, plus or minus ten years, was assumed.

To improve the diversity of inputs and the clarification of the priorities and significance among trends, the previous document mentioned above was circulated to the task force, workshop participants, and a substantial number of other interested and informed parties for review and comment.

Since this paper is intended to assist in the implementation of the foresight provision, a note of explanation is in order. The foresight provision is a rule adopted by the House of Representatives which directs each House Committee to do futures analysis, beginning in 1975. Rule X, section 2 (b) (1) of the House rules, states that each committee, except Budget and Appropriations, "...shall review and study any conditions or circumstances which may indicate the necessity or desirability of enacting new or additional legislation within the jurisdiction of that committee (whether or not any bill or resolution has been introduced with respect thereto), and shall on a continuing basis undertake futures research and forecasting on matters within the jurisdiction of that committee."

Therefore, this paper is a summary and digest of principal demographic trends influencing elementary and secondary education. While the analysis, in view of the limitation in time, cannot claim to be exhaustive, we do believe it provides a sound, reliable and comprehensive base for further probing of the demographic factors, through a hearing mechanism, through directed agency studies, or through the reaction of state and other affected parties.

The results of this exploratory task in response to Chairman Perkins' request suggest that the Subcommittee hold hearings to address the matters raised in this paper before determining whether a full assessment by OTA shall be requested.

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DEMOGRAPHIC TRENDS INFLUENCING THE ELEMENTARY AND SECONDARY SCHOOL SYSTEM

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I. INTRODUCTION

This paper was prepared in response to a request from the House Committee on Education and Labor for assistance in the 95th Congress in the exercise of the foresight provision with regard to its consideration of the Elementary and Secondary School Act (ESEA).

At the request of the Committee Chairman, this paper specifically focuses on demographic trends. Its purposes are (1) to provide the Committee with an alert or early warning on the policy implications of changes in the structure of the population, and (2) to assist in the identification of some problems and issues growing out of those demographic trends.

In pursuit of this task, a nominal time frame of ten to thirty years has been assumed. As will be apparent in the details below, the ability to firmly define trends over that interval and to relate the trends to policies is hardly uniform. The forecasts are far more ragged than is suggested by the nominal time interval of interest.

The primary objective of this paper is the identification and clarification of trends. Therefore, major emphasis is on the trends themselves with preliminary emphasis on policy implications. Some interpretation of the trends is in order, to relate them to the Committee's interests. But in view of the request, as well as the constraints in time and labor, no effort has been made to probe all of the policy implications in depth against a background of current and proposed legislative, regulatory, and funding activities at the Federal and state levels.

As a further constraint, those items which the Subcommittee is likely to be considering as part of its regular review of ESEA and which are being given attention by the sister agencies in the Congressional family--CRS, GAO, and CBO, are not emphasized.

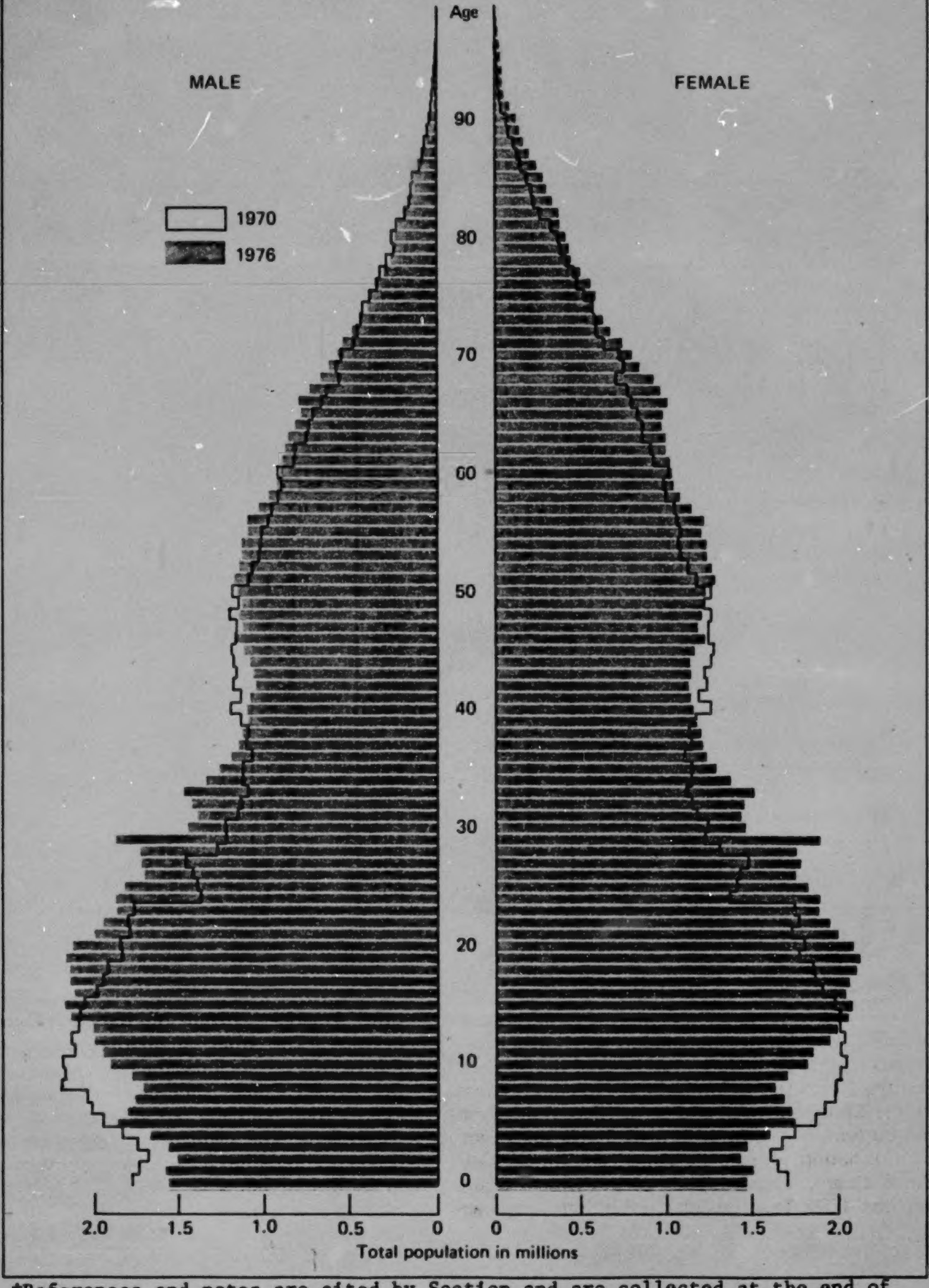
A. What is Demography?

Demography is a branch of the social sciences dealing with the determinants and consequences of population change. It treats vital and social statistics, such as birth, death, marriage, and disease rates, and the size, density, distribution and mobility of populations.

Much of the future change is built into present age distributions and the age specific birth and death rates that prevail now and in the coming years. The age composition of the population is in continuous flux as can be seen from Figure 1. Even in the

FIGURE 1*

Distribution of the Total Population, by Age and Sex: April 1, 1970 and July 1, 1976



*References and notes are cited by Section and are collected at the end of the paper.

interval from 1970 to 1976, there are noticeable shifts in age distribution, particularly in the large numbers of "baby boom" children. As the post World War II baby boom cohort (age group) moves through society, i.e., as it ages, it will create waves of effects as each new cohort of the age distribution swells and, subsequently, contracts. The principal determinants of future population patterns will be age specific birth rates or fertility rates and to a lesser extent immigration patterns. Death rates have not changed appreciably in decades, nor are they likely to.

A summary view of the major shifts in the numbers of people in varying ages from now to 1995 may be seen in Figure 2. Projection Series II is today's "best guess" forecast.

The present and the past are decreasingly satisfactory models for the future, particularly for the future of the educational system which is undergoing major change. Planners and policymakers, therefore, need a substantive basis for understanding change. Demography is one such basis. It has the advantage of being quantitative and structural with regard to the organization of society, and quite reliable in its ability to forecast, from a policy point of view, over interesting intervals of time.

B. The Organization of the Paper

Immediately following is a summary of the highlights of the study. The next sections treat the individual demographic trends in some detail.

FIGURE 2

Projected Sizes of Functional Age Groups[2]

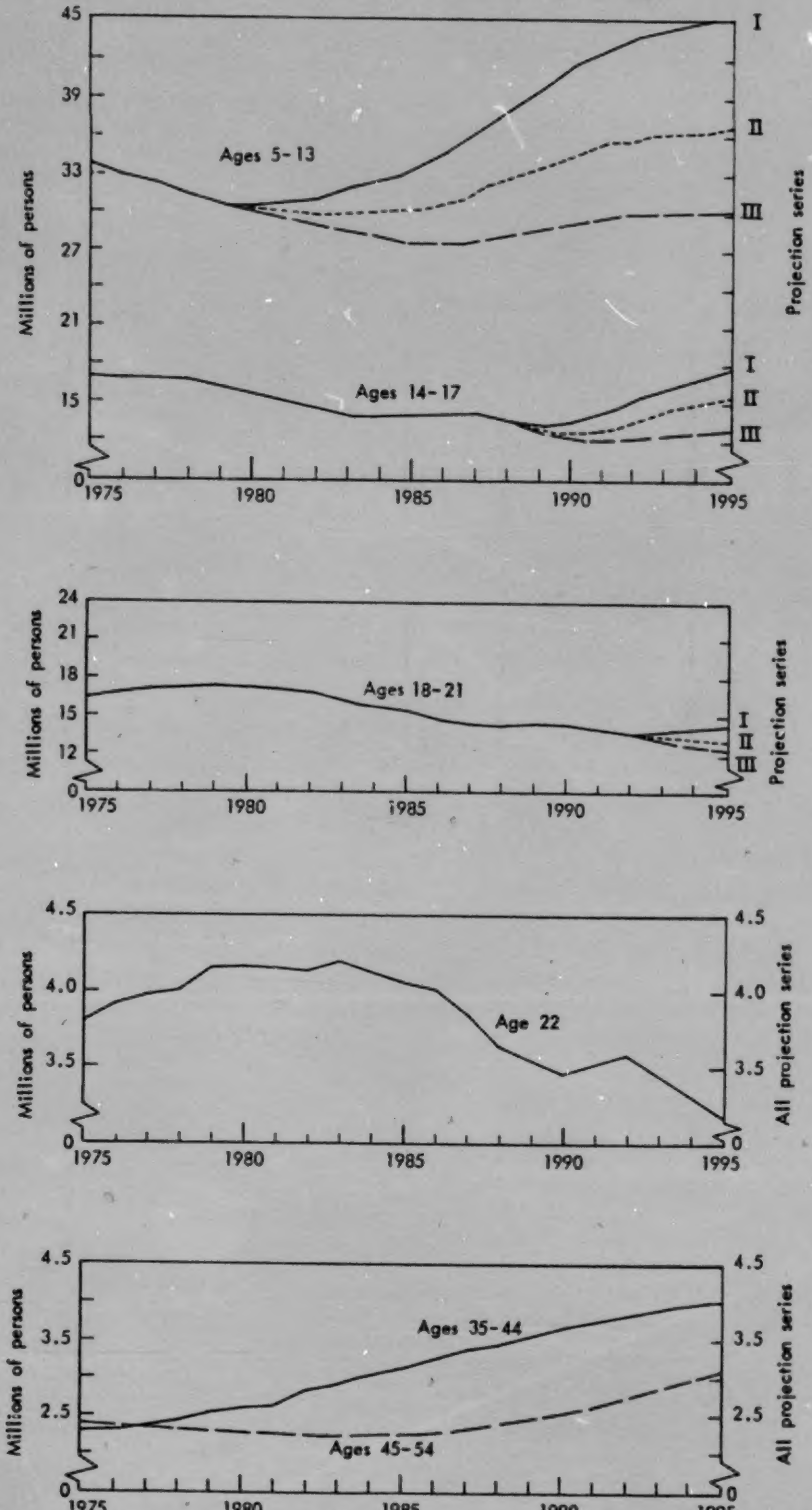


Table 1 outlines the principal demographic categories considered in this paper.[3] Some attempt is made to organize material in cross-cutting categories, such as the demography of the decline in school enrollment and the demography of schools, since these categories highlight the principal policy implications. While the focus of the paper is demographic, there are some trends of a non-demographic sort which are likely to have strong interaction with the demographic trends. These include energy availability, economic growth, civil rights movements, birth control and abortion technology, and changes in work schedules. Some of these non-demographic trends are outlined in Table 2.

To help identify where the demographic trends will impact the elementary and secondary school system, a working list of elements of the elementary and secondary school system has been prepared--Table 3. This Table is referred to throughout the text to develop the discussion of trends and to check for salient points of impact.

TABLE 1

DEMOGRAPHIC TREND CATEGORIES POSSIBLY INFLUENCING ELEMENTARY AND SECONDARY SCHOOL EDUCATION

1. Birth and Fertility Rates

2. The Family

   - Marriage/Divorce/Separation/Remarriage Rates
   - Household Size, and Rates of Formation
   - Female-Headed Households

3. Women's Entry Into Work Force Full and Part-time

   - Working Women
   - Working Wives

4. Occupational Structure

5. Internal Migration

   - Metropolitan-Nonmetropolitan
   - Black/Hispanic/White
   - Poor/Working Class/Middle Class
   - The Growth of the Sunbelt

6. Residence

   - Rural/Urban
   - Big City-Small City
   - North-South
   - Suburban-City

7. Income

   - Regional Income Patterns
   - Rising Incomes
   - Dual Income Families

8. Special Populations

   - Blacks
   - Hispanic: Mexican and Puerto Rican
   - Other Ethnic Groups

9. Immigration from Foreign Countries

10. Youth Employment

11. Educational Level

   - School Attendance: Public; Private; Parochial
   - Dropouts
   - ADC Mothers

12. Puberty

TABLE 2

NON-DEMOGRAPHIC TREND CATEGORIES LIKELY TO INTERACT WITH DEMOGRAPHIC TRENDS

*1. Changes in Rate of Economic Growth

*2. Energy Availability

*3. Civil Rights Movements

*4. Expansion and Specialization of Human Services Occupations

*5. Birth Control and Abortion Technology

*6. Flextime and Alternative Work Schedules

7. TV and Other Media

8. Government Intervention

9. Welfare Demand and Supply

10. Attitude Toward Work

11. Intergenerational Changes

Grandparent Child
Rural/Urban
Illiterate/Literate
Noneducated/Schooled
Foreign Born/Native
Farm/Blue Collar/White Collar

12. Shifting Public Goals, Desires, Expectations

13. Demonstrations/Activism

14. Increasing Complexity of Society

15. Accelerating Change in All Sectors

16. Sub-trends in Urban Areas

- Secularization of Attitudes
- Anonymity/Impersonality
- Separation of Work/Residence
- Travel
- Age Segregation

---

*Asterisked items are particularly likely to strongly interact with demographic trends.

TABLE 3

ELEMENTS OF ELEMENTARY/SECONDARY SCHOOL SYSTEMS

- Goals
- Students
    - Number
    - Kind
    - Distribution
    - Performance (Test Scores)
    - Equity/Access
    - Self Development
    - Segregation
    - Busing
    - Legal Status, Rights
- Structure - Management, Staff
- Finance
- Content - Curriculum
- Teachers
    - Production
    - Distribution
    - Requirements
    - Reserves
    - Retraining
- Teaching Resources
- Facilities
    - Size
    - Location
    - Consolidation
    - New Roles
    - Design
- Quality Control
    - Accountability
- Community Role
- Planning
- R&D
- Other Goals

o Private/Parochial vs. Public School
o Legal Questions

C. Summary Observations

1. School Age Populations

The size and distribution of the U.S. population are the results of past birth, death and migration rates. Since the death rate is not expected to change and since immigration has been semi-controlled at a set level, it is possible to project with very high accuracy the future size of cohorts (age groups) of persons already born. Furthermore, since the fertility rate is not likely to undergo any large excursions in the short run, i.e., over the next three to five years, one can make further extrapolations of elementary and high school populations with high reliability. For example, one can say with great certitude that the size of the high school population of 1990 will be about 25 percent smaller than in 1975.

Judging from the "best guess" forecasts, recent declines in elmentary school children are likely to continue through mid-1980's. Thereafter, the number of school children will rise, leveling off about 1990 to present levels.

For the nation as a whole, reliable predictions can be made about the total number of children entering the elementary school system through the mid-1980's and entering the high school system through the early 1990's.

2. Local Impacts

The steady decline in school populations, while predictable at the national level, may have little bearing on the situation faced by state and local planners since the details of internal mobility and migration and the special needs of subpopulations create local or regional shifts within the school system which may exaggerate or counter the general downward trends for the nation. The dominant policy actions are at the city, metropolitan, district, state and regional level.

3. Inadequate Local Capabilities

Demographic analysis capabilities are inadequate at the state and local level for understanding and dealing with the major demographic trends. Limitation of data restrict demographic analysis and especially forecasting at the state and local level.

4. Decline Is Too Simple a Concept

Shifting school populations, local growth and local decline are more appropriate planning concepts.

While there may be an overall surplus of schools in many areas of the country one can still anticipate shortages of facilities and teachers and the need for training, particularly in those areas which are upgrading their schools as a result of greater resources, new population, judicial and legislative mandates.

5. The Data Base

The data base being generated by the Federal government (in terms of surveys, censuses, demonstrations, research, and the presentation of policy focused information on demography) falls short of the national, state and local needs.

6. Major Demographic Factors

The dominant demographic influences impinging on elementary and secondary school education are:

a. Birth and fertility rates.

b. The rates of family formation and dissolution, particularly the rates of household formation and the rapidly growing number of female-headed households. These shape the millieu of which the school is an important complement within which children are socialized.

Approximately 45 percent of children born in 1976 will have lived with a single parent for some time before they reach 18 years of age.

The proportion of children living with both parents declined from 88 percent in 1960, to 83 percent in 1970, and reached 80 percent in 1976.

The growth of female-headed families with children has increased by over 250 percent since 1950. Further, such families comprise 41 percent of all poverty level families.

Single-parent families are almost always in relative if not absolute poverty. Limited income will create new demands and stresses as well as the need, if not the pressure, for compensatory public services.

c. Women's entry into the work force will affect every aspect of elementary and secondary school education by creating more curriculum demands and new service demands, such as day care services for children and replacement for previously volunteered services.

d. Local mobility and internal migration are perhaps the two most important factors in producing state, regional and local deviations from other large scale national demographic trends. Movements between cities and suburbs, and between metropolitan and nonmetropolitan areas, as well as internal migration of subpopulations, such as Blacks, Hispanics, and middle and working class families of all races, are major complicating demographic factors in elementary and secondary education planning.

e. The growth of the so-called sunbelt will create local imbalances, local growth, and demand for new facilities. At the same time, it will promote further income equalization among regions.

f. Boom towns are likely to have a major impact on local school systems in Kentucky, southern Illinois and several western states as fossil fuel resource development proceeds.

g. Immigration now accounts for roughly 25 percent of national population growth and should be a continuing source of distress to the school system, especially in metropolitian areas:

In 1975, of the 386,194 legal immigrants, 34% were located in the ten largest U.S. metropolitan areas and 45% were located in cities with a population greater than one million.

h. The partitioning of populations between public and private schools, particularly the movement of the middle-class school populations into private schools, may be gradually creating a slow building but major crises for the viability of a democratic, egalitarian school system in our biggest cities. The net result could be not just ghetto schools but ghetto school systems.

7. Puberty

The age of the onset of adolescence--which has been steadily declining at the rate of four months per decade since 1830 may now have levelled off.

The junior high school has never adequately come to grips with the onset of puberty in terms of curricula, services or goals. Especially critical is the increasing rate of early sexual activity among boys and girls of junior high school and high school age, creating both immediate and long-term social and educational problems and needs associated with adolescent childbearing. The only age group in the United States now undergoing significant expansion in birth rates are females under age 15.

8. Responses to Decline

In the face of declining enrollments and increasingly underutilized or overcapitalized facilities, school administrators are faced with three major alternatives:

- to contract, that is, reduce the number, size or staffing of facilities
- to seek new clientele
- to expand services to the current available clienteles

Each of these options is being exercised. The most significant implications for education are in the expansion to new clienteles and the extension of services for present clienteles. At the high school level new services to adults include continuing education, certification of high school graduation or other credentials, recreational and hobby needs, career facilitation, and skill training of direct economic benefit, such as auto and home repair.

The key new market for the elementary and junior high school systems may be the further extension into nursery school and day care services and the forward extension to provide longer time attention to the child during the day (from 3:30 to 6:00 p.m.). Both markets reflect the needs of working mothers.

9. Big Cities and Small Communities Are Hardest Hit by Decline

In the period of 1968 to 1974, big city school systems increased by an average of 95 percent in minority student enrollment. As of 1974, the average student minority enrollment was 67.1 percent.

The 27 largest cities in the country peaked in their total school enrollment in 1970-71 at 5.4 million. In 1975-76 enrollment declined to the level of 1962-63.

10. Resegregation

The 187 largest school districts provide schooling for some 27.3 percent of all school children. For those dissatisfied with the urban school systems, there are several options:

- family migration to suburbs or to other areas
- the withdrawal of the child from the public school system into the private school system
- early graduation
- removal from the school and graduation by certification
- tracking

The sum of all these processes is resegregation. The reasons for dissatisfaction with schools as reflected in demographic trends are not well enough understood. The relative importance of racism; concern about the quality of schools; concern about deportment and behavior in schools; classroom-subject content, such as sex education; residential concerns, such as the quality of the neighborhood and crime and more subtle demographic factors such as steady rate of removal and dropped rate of population replacement, merit further attention as problems which must be dealt with to bolster the viability of major urban school systems.

11. Bilingual Education

The relationships between immigration, foreign language, and educational success give high priority to questions of role, function, and style of bilingual education--what it accomplishes, and what the opportunity costs are, i.e., what the student does not get at the price of bilingual teaching.

If the bilingual education of students whose primary language is not English, particularly in big cities, overstresses the system so that the job is done badly, the level of education of English-speaking students may also be reduced, futher accelerating the decline of the urban school systems.

The continued immigration of foreign-born students will renew the kinds of cross cultural stresses associated with students who are hard to acculturate. This often results in delinquency and poor school performance, particularly for urban school systems.

Changing the status of new, illegal immigrants might have an effect on school systems by promoting marriage and family formation, and thus result in a higher rate of entry of children into the school system. This will especially affect big city systems and the smaller communities in the Southwest and in California.

12. State and Local Needs

A significant opportunity to stimulate state and local officials to integrate demographic data into educational planning exists. There is a place for nationally generated projections of state and local populations and more timely consideration of the enrollment shifts of which they give early warnings. There is also a useful role for state and more locally generated population projections. Demography, as applied at the local level, necessitates an element of judgment. Familiarity with local circumstances can play a major part in whether a given forecast is policy useful or policy irrelevant. In general, there is not enough expertise now at the state and local levels to meet this need.

13. Upswing In The 1980's

There is likely to be an upswing in school populations in the mid-1980's. This should result from a second wave-effect of the post-WWII baby boom children who, in turn, are bearing their own children now. There are several strategies available for accommodating that small rise, particularly in terms of teacher supply. First is the preparation of teachers through the normal supply channels of teacher education. Second, and more attractive from a public policy point of view, may be certification of recent graduates from other areas or the certification of those trained in teaching who have either long since dropped out of teaching or never employed their skills. The key question is how to insure flexible entry when the need arises.

In any case, there is sufficient lead time, (five years between an upsurge in births and entry into the elementary school system), to allow for effective planning. The more crucial planning problem is in the reverse direction, namely, managing the overall declining and shifting demand for school teachers.

14. Decline Is Not Universal

Extension, expansion, and growth is occuring in the so-called sunbelt, which in fact is an area covering much of the South, Southwest, and Rocky Mountain States. With regard to growth areas, it should be noted that:

a. Some 95 percent of persons moving from metropolitan to non-metropolitan areas are white. One may, however, anticipate as with previous social experience that non-white groups will catch up.

b. The movement of urban populations into rural areas is likely to create several stresses on present rural education systems. One example is a higher demand for educational amenities to which the urban dweller is accustomed.

c. Since any upsurge of population is likely to find its initial growth in the kindergarten and lower grades, it would be timely to consider flexible physical plant design and school location in growth areas, so that the new school population (as it moves through the local school system) can be accommodated without crisis.

d. Since 60-80 percent of school expenditures are salaries, the most common action in response to declining enrollments has been the elimination of teaching positions. Attention should, therefore, be directed towards mitigating the shock of across-the-board teacher lay-offs through ordered early retirement, retraining, recertification, and so on. It should also be noted that accompanying a decline in the demand for school teachers will, undoubtedly, be a movement toward increased credentialism which may have an adverse effect on the quality, vitality, and age distribution of teachers.

D. Some Policy Action Implications of Demographic Trends

The highest payoff actions meeting the clearest needs are those involving the generation and distribution of knowledge about demographic trends to relevant state and local government planners. This generation and distribution could flow out of research, monitoring, surveys, data gathering, and to some extent from demonstrations.

Familiarity with local circumstances can play a major part in whether a given forecast is policy useful or policy irrelevant. In general, there is not enough expertise now at the state and local levels to meet this need.

The second major action area, therefore, is building capacity at the state and local level for more effective and timely planning in response to unfolding demographic trends. Building analytical capabilities and an information base focused on more fine-grain, detailed, and local analysis is needed.

Some of the detailed actions which seem to be practical and effective in dealing with the situation are listed below:

1. Generation and Delivery of Knowledge and Information

A main limitation on more effective Federal, and particularly, state and local level planning is the dearth of adequate, focused and timely information. A number of specific measures could greatly improve this situation.

- The monitoring of specific population trends and the presentation of that information in a more educational issue-oriented mode dealing with birth, fertility, internal migration, immigration and demographic data is one key to better planning.
- The Census Bureau's state level projections are about ten years old. There is substantial opportunity in 1980 to generate and present more salient data. There is the further opportunity to modify the content of the data collection for the 1985 census.
- It may be worthwhile to innovate in terms of census collection, by going to much more sophisticated sampling techniques in which just a tiny fraction of the total population is sampled in depth, by carefully selected modes to give highly reliable data. Obtaining local estimates for small areas or sparsely populated areas would present special technical problems, using sampling techniques.
- The collection of appropriate, timely data on adult needs and activities is of primary importance in setting policy at local levels. Backing up better understanding of this potential market could be a series of demonstration and study projects to test and identify effective community adult education delivery systems.
- Assuming that extended day care, nursery care, and after school services are other plausible avenues for

expansion, data are insufficient on the needs of that clientele, the criteria for selection, kinds of services appropriate at different direct or indirect costs, and criteria and constraints on the user, usually the working mother.

- Paralleling this is the pressing need for more salient research on the effects of alternative caring systems on children as a function of their age, the socio-economic status of their family, the number of adults in the household, cultural background, and so so forth.
- Information needs to be directed at the parents and citizens outside the school system on how to set up, run and select nursery and day care programs.
- The information base is quite inadequate with regard to the influence of a number of demographic factors on the school child and, hence, on curriculum, service, and scheduling needs of schools. These include factors such as being a member of a single parent family, or a migrant or immigrant family. These merit more intense research and evaluation.
- Specific detailed case examples of satisfactory and unsatisfactory responses of school districts of different sorts--urban, rural, large community, or small community could be developed through short-term, highly focused

research, appropriately packaged and delivered to state and local planning officials, and other interested parties.

- Along that same line, extensive funds are not being expended on developing demographic data for energy, transportation, urban planning, and so on. A review of the applicability of these data bases to education planning is appropriate since marginal expenditure may yield substantial benefits.
- Population models and "how to do it" packages, useable at varying levels of government, could be developed, demonstrated, and disseminated by Federal agencies as a very useful complement to the program suggested above.
- It would be useful if one of the key Federal agencies concerned with population and education could organize demographic conference focused on the state of the art at the state and local level. From this, one could determine explicit, positive measures that could be taken in the long and short-run to enhance the capability to use demographic information for educational policy planning.
- Much of the suggested work in this area could be accommodated by the Bureau of the Census expansion of the proposed monthly state-by-state survey and economic

surveys. Other projects would usefully fit in with the developing programs at the National Institute of Education.

2. Building State and Local Capacity

The steady decline in school populations, while predictable at the national level, may have little bearing on the situation faced by particular state and local planners, since the details of internal mobility and migration and the special needs of subpopulations create local or regional shifts within the school system which may exaggerate or counter the general downward trends for the nation. The dominant policy actions are at the city, metropolitan, district, state, and regional level.

- Demographic analysis capabilities are inadequate at the state and local level for understanding and dealing with the major demographic trends. Limitations of data restrict demographic analysis and, especially, forecasting at the state and local level.
- The promotion of the organization of policy-focused demographic data at the state level is crucial. The general extension of state demographic services to local governments is highly desirable. One possible model would involve the creation of some centralized agency for demographic services at the state level to supply basic data and to collate individual forecasts made at the local levels.

- In some areas of the country, where relatively sparsely populated but economically integrated land units overlap state boundaries, the promotion of such activities on a regional multi-state basis would be useful.

In summary, the principal Federal actions appropo of demographic trends are: first, to stimulate the state, local, and regional capacity to use such data in their planning; and secondly, to marshal Federal resources to provide a better information and knowledge base for such projections.

II. DEMOGRAPHIC TRENDS

This and the following Sections present the basic information on demographic trends displayed in Table I which are likely to influence elementary and secondary school education. The trends considered are, first, those basic to the production of children--birth and fertility rates. Next, there is a discussion of the family, women's changing participation in the work force, and some general considerations of occupational structure, internal migration and income. After some notes on special population trends and immigration from foreign countries, trends dealing with the demography of education are also considered. Finally, the changes in the onset of puberty, that is, the passage into adolescence, are discussed.

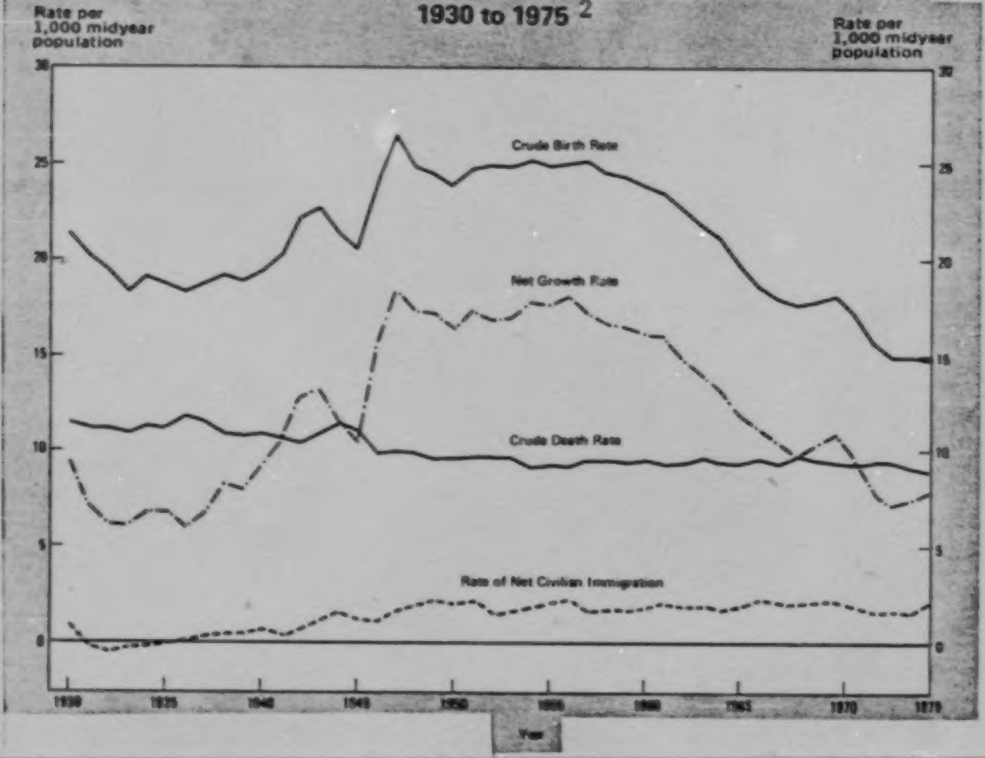
With regard to each section, as appropriate, some interpretation is made as to the implications for the educational system. Some critical non-demographic trends interacting with demographic trends are presented in Section XII.

A. Birth Rates[1]

The size and distribution of the U.S. population are the result of past birth, death, and migration rates. Of these three, changes in the birth rate have caused most of the fluctuation in the age distribution and population growth in the past several decades (Figure 3). The effect of the low fertility of the depression years, the post war baby boom and the more recent decline can be seen in Figure 1. By 1970, these changes in past fertility caused a bulge in the school age (including college) population; by 1975 they caused a decline in elementary school enrollments and increasing pressure on the entry level job market.

FIGURE 3

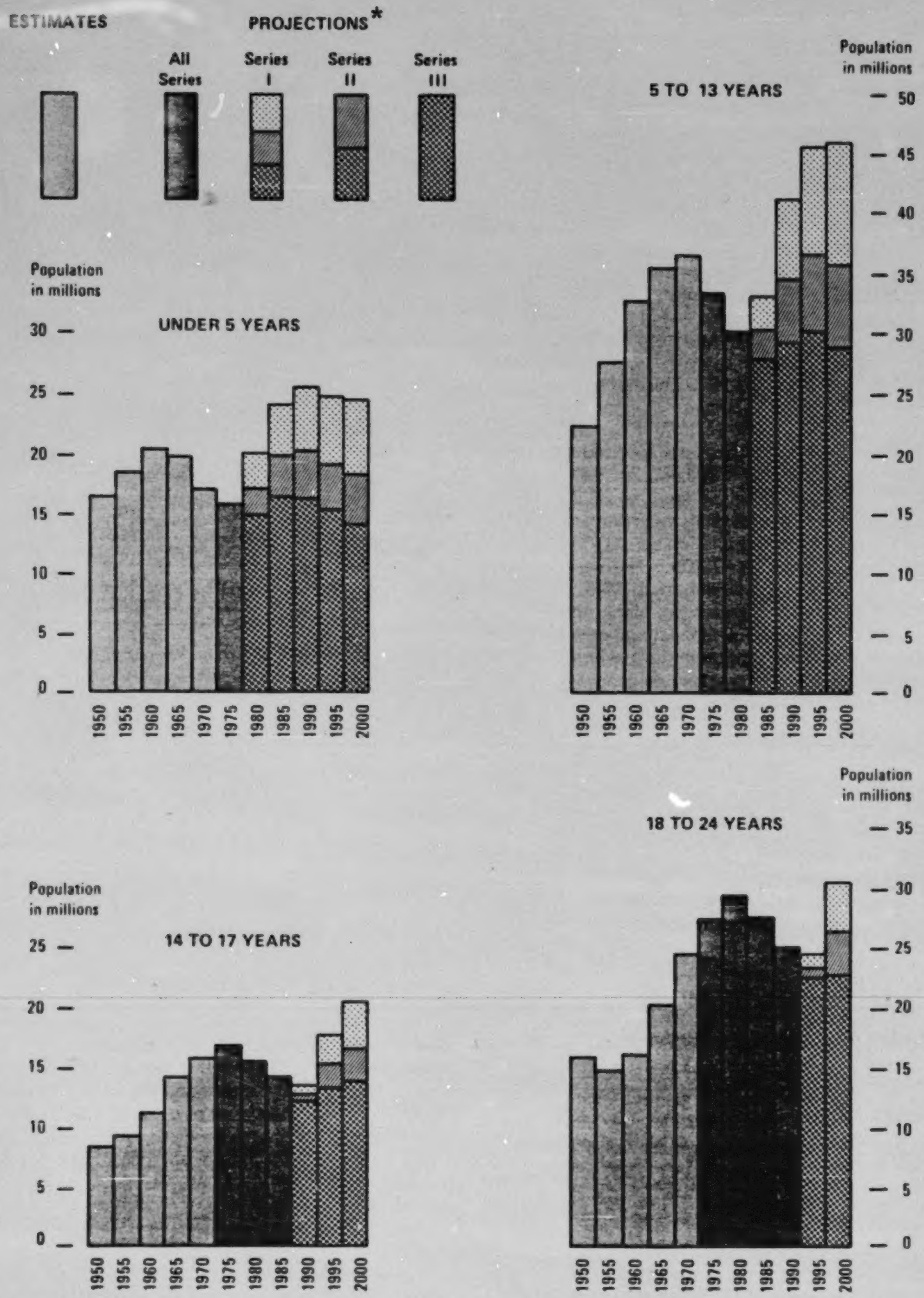
Annual Rates of Net Growth, Births, Deaths, and Net Immigration: 1930 to 1975 [2]



Since the death rate is unlikely to change much, and since immigration has been semi-controlled by law, it is possible to project the future size of cohorts (age groups) of persons already born with some accuracy. We know today the approximate size of the high school age population in 1990 (about 25 percent smaller than in 1975). and the college age population in the mid-1990's. We can predict with a useful degree of accuracy, the number of middle-aged persons at the turn of the century and the number of old age pensioners in 2040, although, obviously the longer the time horizon, the greater the chance that "all things" won't "be equal." However, to forecast the future size of the younger age groups whose members are not yet born and the age distribution of the entire population, it is necessary to predict the level of fertility. While predicting the number of children women will bear in the future is uncertain, the probable range can be calculated, since we know the number of women of reproductive age for at least fifteen years in the future. From surveys, we also have information on patterns of childbearing, and the number of children young women say they want and expect to have. Since the range of population size forecasts can be quite large depending on assumptions, different forecasts have different policy implications.

The Census Bureau has projected three sets of annual numbers of births based on the presumed completed family size of younger women. These are called Series I, II, and III and the differences they make in the projected size of age groups are shown in Figures 4 and 5. Series I assumes a completed family size of 2.7 children per woman, Series II, 2.1 children, and Series III, 1.7 children. The Census Bureau and most demographers suggest Series II as the most reasonable, based on surveys of birth expectations of young women.

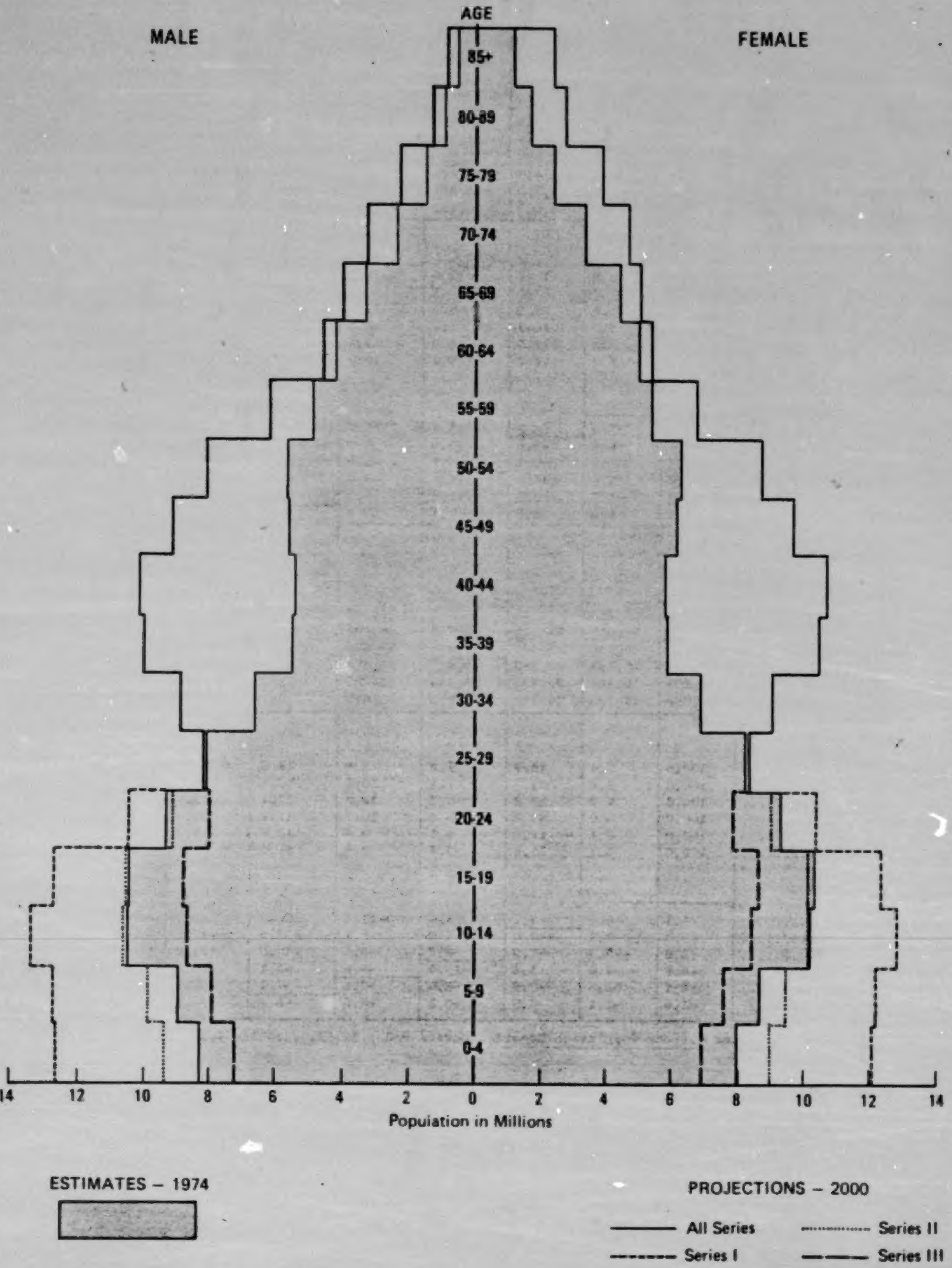
Fig. 4 **Estimates and Projections of the Population of the United States by Age: 1950 to 2000**[3]



*Series I assumes completed family size of 2.7 children
Series II assumes completed family size of 2.1 children
Series III assumes completed family size of 1.7 children

FIGURE 5

Estimates and Projections of the Population of the United States, by Age and Sex: 1974 and 2000[4]



B. Principal Implications Of Population Projections

The principal implications from the "best guess" forecasts is that recent declines in the elementary school population are likely to continue through the mid-1980's. Thereafter, the number of school children will rise, leveling off after 1990 to today's levels.

Similar declines at a slower rate and with a narrow range of variation will occur in the high school age group. School age populations from 1950 to the year 2000 are shown in Figure 4.

Figures 2, 4, and 5 all present the same basic information but in somewhat different formats. Figure 4 most graphically illustrates the implications of the choice of forecasting Series I, II, or III on anticipated school populations. Note that all three series show a steady decline in high school attendance to 1990. With regard to elementary school attendance, one can see a steady decline or leveling off through 1984 for both the lower bound assumption of 1.7 children and the most likely assumption of 2.1 children, followed by a rise in the number of children entering elementary school. The combination of high certainty about existing populations and the marginal uncertainty about soon-to-be-born populations is clearly shown in Figure 2.

Comparing Figure 5 with Figure 1, one can see how the baby boom has moved forward creating a bulge by the Year 2000 in the 30-55 year-old range. The lower part of that figure shows the alternate bulging or non-bulging depending on the assumptions adopted on ultimate family size. It is clear from these figures that the range of ultimate family size, and specific fertility rates are dominant considerations in the make up of yet unborn school populations. We will now turn to the discussion of the details of the trends in fertility.

C. Fertility Rates

During the past 10 years all indicators of fertility have shown a declining tendency for women to have children: women are marrying later in life, the first child is born later into the twenties, the second child is delayed compared with birth patterns in the 1950's, women are planning to have only two children in their lifetime instead of three or four as in the 1950's and they are having them at a rate in the 1970's that would produce about 1.8 children per woman if the current rates were followed for a lifetime. As shown in Figure 6, the births per thousand population rose rapidly in 1947-49 with the return of the GI's and the rates remained high for about the next fifteeen years. Since the early 1960's, there has been a steady decline to the present low of just under fifteen births per thousand. More interesting is a total fertility rate shown in Figure 6, which is an age-standardized measure of current fertility. It shows how many children a woman would bear if she experienced the current age specific birth rate during her entire reproductive span.

The comparison in Figure 6 dramatizes the "generational differences" in American childbearing. The fertility rates of the late 1950's would have produced almost four children per woman over her total lifetime. The present fertility rates would produce somewhat fewer than two births over the whole lifetime. These current figures reflect the long-term aspirations of young women. Survey research shows a long-term decline in reported numbers of expected children. Figure 7 shows the average number of children ever born to women 45 to 49 years old and illustrates

FIGURE 6

Annual Measures of Fertility: 1940 to 1974[5]

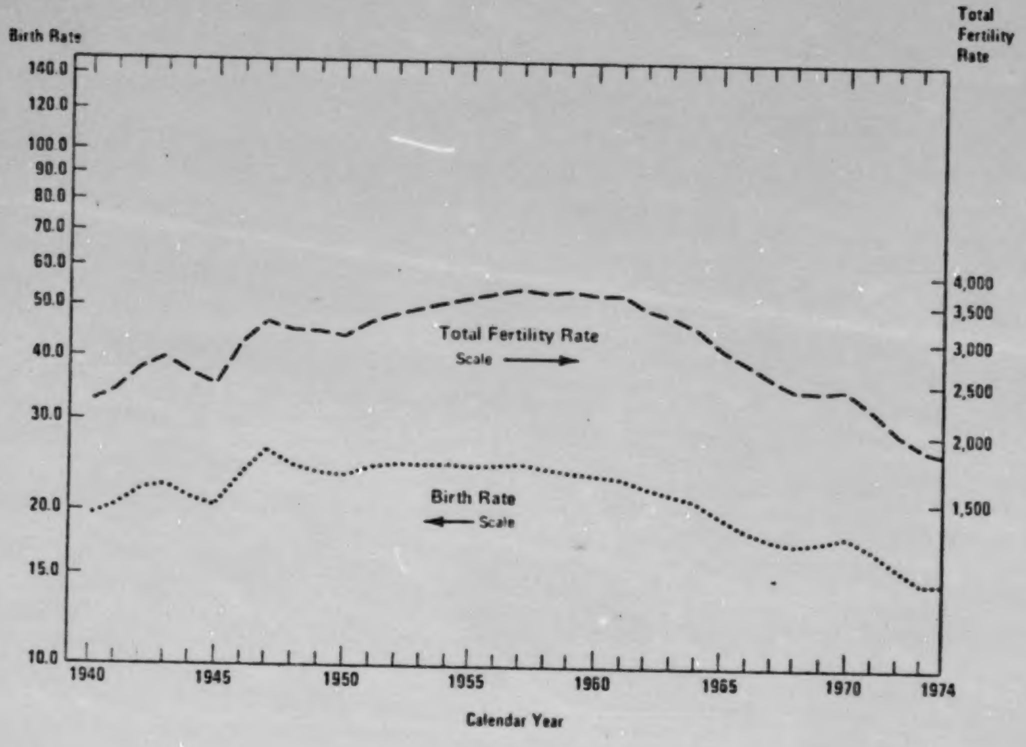
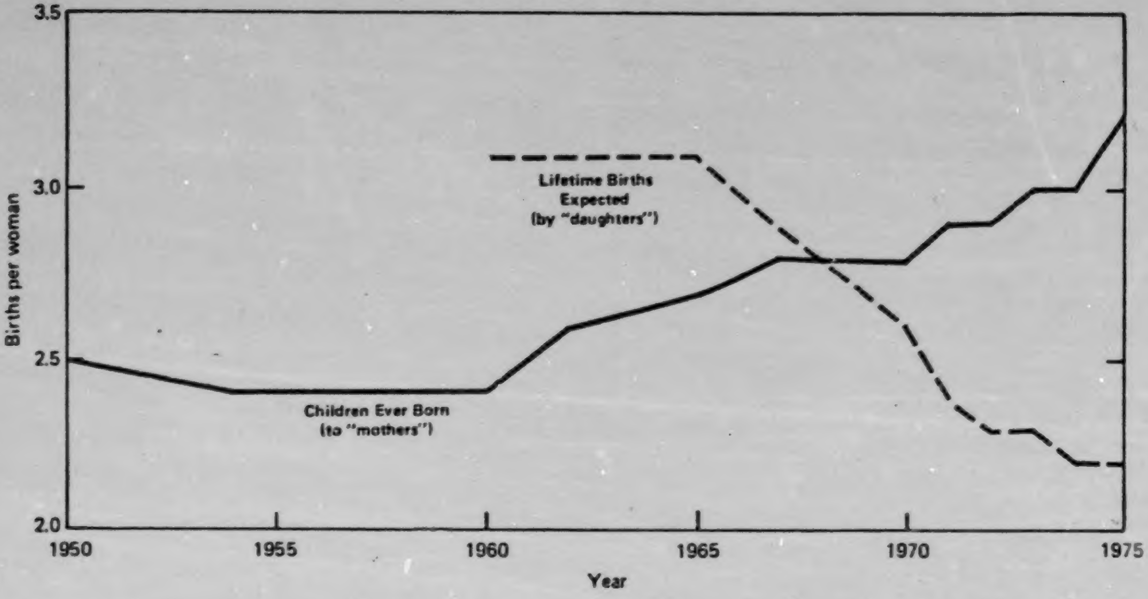


FIGURE 7

Average Number of Children Ever Born to Ever-Married Women 45 to 49 Years Old and Lifetime Births Expected to Currently Married Women 18 to 24 Years Old: Selected Years, 1950 to 1975[6]



the sharp decline in expected births by their daughters' generation, 18-24 year olds. For example, young married white women 18 to 24 in 1960, reported their total number of expected births to be 3.0; in 1967, 2.9; in 1971, 2.4, and in 1975, 2.1 (Table 4a). A parallel decline has occurred for Blacks--2.8 in 1968, to 2.5 in 1975.

The percentage of currently married women who are childless and the percentage expecting to remain childless are shown in Table 4b and Figure 13. A smaller percentage of Blacks expect to remain childless as of 1975. Among women 20 to 24 years old, 4.7 percent of whites and 1.4 percent of Blacks expect to remain childless as of 1975, among women 25 to 29, 4.9 percent whites and 4.3 percent Blacks expect to remain childless. Among women 30 to 34, it is 5.5 and 3.8 percent respectively.

The peak of the percentage of women never bearing children were those born in 1905-1909 (Figure 11). The birth rate of Blacks closely parallels that of whites. By the turn of the twentieth century, the Black-white fertility differential was still quite large but this differential narrowed considerably after World War I. Although large fertility swings in the Black population have paralleled those in the white population in the past fifty years, a fairly constant differential of 8 to 11 points has persisted in the crude birth rate (Figure 8 and Table 5).

A more detailed analysis of age-specific fertility trends in the United States since World War I is presented in Figures 9 and 10. For both races, a noticeable concentration of childbearing in the 20 to 29 year old age range has occurred in the past fifty years. Fertility of women over age 29 has drastically fallen for both races since 1920.

TABLE 4a Average Number of Births to Date and Lifetime Births Expected by Wives Reporting on Birth Expectations: Selected Years, 1955 to 1975 7

Race and year	18 to 24 years		25 to 29 years		30 to 34 years		35 to 39 years	
	Births to date	Lifetime births expected	Births to date	Lifetime births expected	Births to date	Lifetime births expected	Births to date	Lifetime births expected
ALL RACES								
1975	0.8	2.2	1.6	2.3	2.4	2.6	3.0	3.1
1971	1.0	2.4	1.9	2.6	2.8	3.0	3.2	3.3
1967	1.2	2.9	2.3	3.0	3.0	3.3	3.2	3.3
1965[1]	1.5	3.1	2.5	3.4	3.1	3.6	3.2	3.4
1960[1]	1.4	3.1	2.4	3.4	2.7	3.3	2.7	3.0
WHITE								
1975	0.8	2.1	1.6	2.2	2.4	2.6	3.0	3.0
1971	0.9	2.4	1.9	2.6	2.8	2.9	3.1	3.2
1967	1.1	2.9	2.3	3.0	3.0	3.2	3.1	3.2
1965[1]	1.3	3.1	2.4	3.3	3.0	3.5	3.1	3.3
1960[1]	1.3	3.0	2.3	3.3	2.6	3.2	2.7	3.0
1955[1]	1.1	3.2	1.9	3.1	2.3	3.0	2.6	2.9
BLACK								
1975	1.4	2.5	2.0	2.6	3.0	3.2	3.9	4.0
1971	1.4	2.6	2.5	3.1	3.5	3.7	4.1	4.2
1967	1.8	2.8	3.0	3.4	3.9	4.3	4.2	4.2
SPANISH ORIGIN[2]								
1975	1.0	2.2	1.8	2.6	3.0	3.2	3.4	3.4

[1] Data are from privately conducted in-depth surveys of fertility and related phenomena, and thus may not be strictly comparable with birth expectations data collected in other years.
[2] May be of any race.

TABLE 4b Childlessness Among Currently Married Women (Excluding Separated): 1960, 1970, and 1975 8

Age of woman at date of survey	1975[1]				1970		1960	
	White		Black		White	Black	White	Black and other races
CURRENTLY MARRIED WOMEN (thousands)								
15 to 19 years	752		66		891	118	877	116
20 to 24 years	3,723		294		4,352	430	3,318	373
25 to 29 years	4,673		392		4,869	441	4,147	473
30 to 34 years	4,263		339		4,345	427	4,733	506
35 to 39 years	3,682		317		4,266	407	5,014	487
	Childless to date	Expecting to remain childless[2]	Childless to date	Expecting to remain childless[2]	Childless to date			
PERCENT								
15 to 19 years	54.5	3.3	(B)	(B)	54.5	31.9	47.1	26.4
20 to 24 years	45.4	4.7	19.7	1.4	38.4	22.9	25.1	18.0
25 to 29 years	20.2	4.9	15.8	4.3	15.8	13.1	12.0	14.8
30 to 34 years	8.0	5.5	8.0	3.8	7.6	9.4	9.2	14.9
35 to 39 years	4.3	4.1	5.7	5.7	6.5	9.8	9.7	18.4

B Base less than 75,000.
[1] Data are limited to the 83 percent of the surveyed women who reported on birth expectations.
[2] Women "expecting to remain childless" are those currently married (excluding separated) and childless women who expect to bear no more children in the future.

Figure 8. Crude Birth Rate of White and Black Population. Ten Year Average 1860–1869 to 1870–1879 and Five Year Average 1880–1884 to 1970–1974[9]

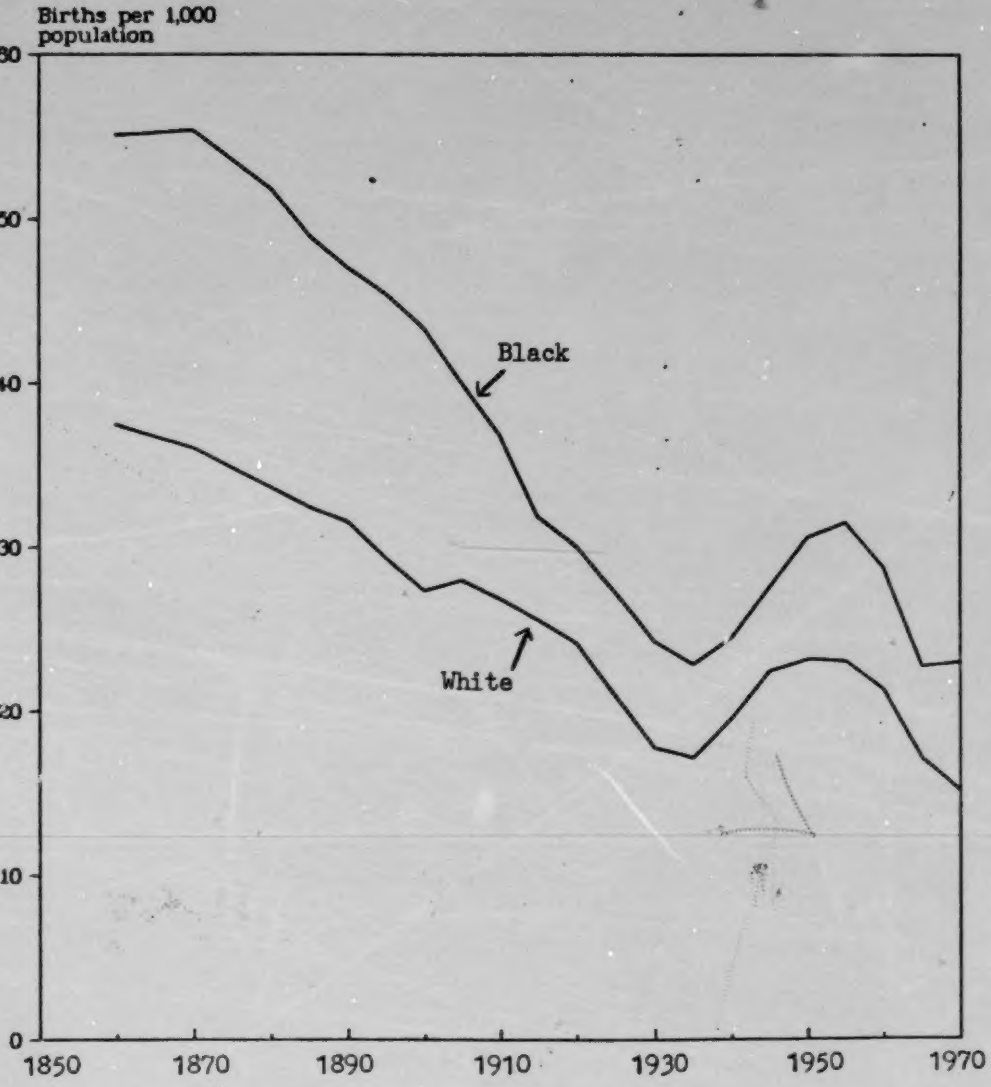
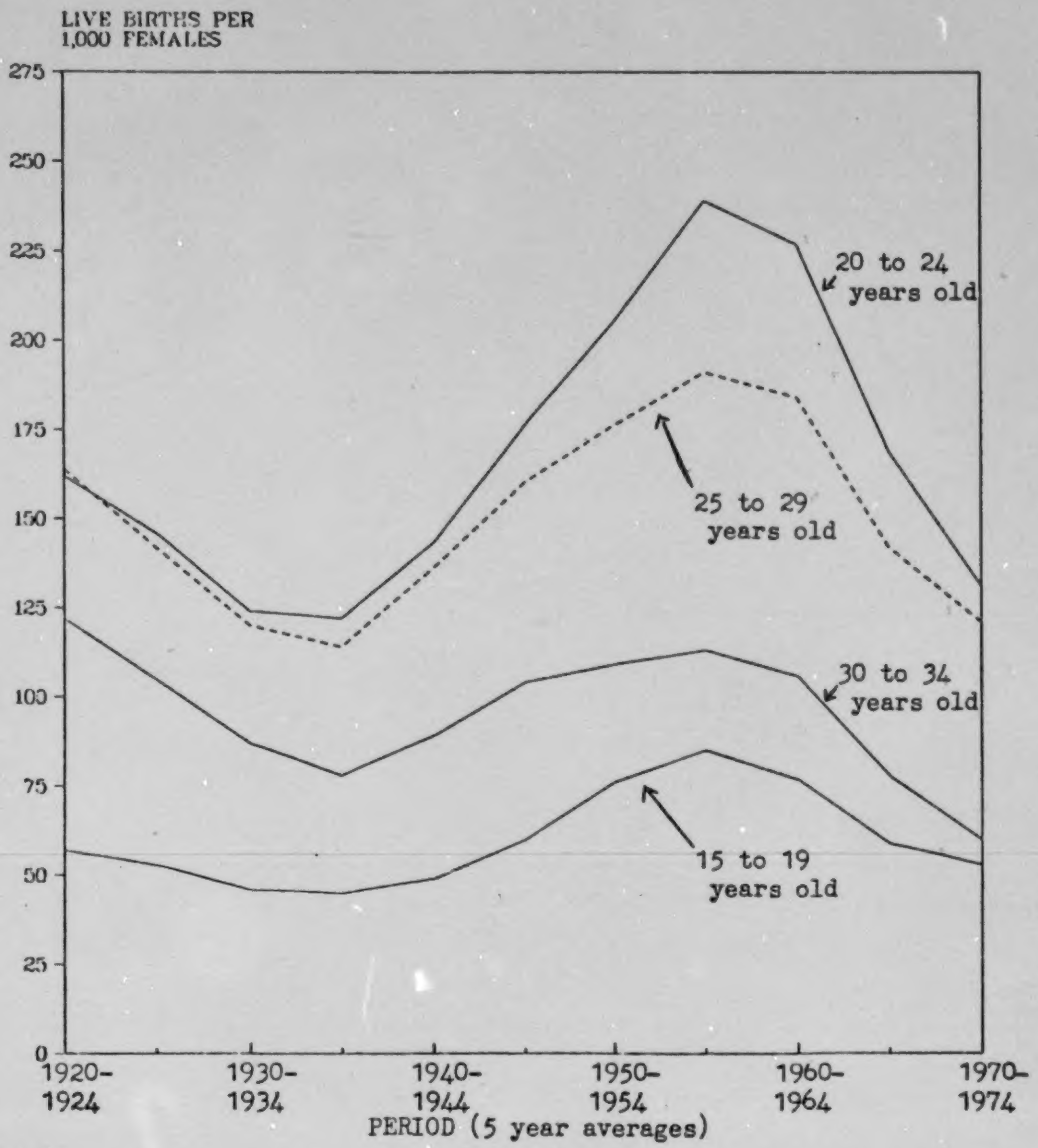


TABLE 5

CRUDE BIRTH RATE OF THE WHITE AND BLACK POPULATION: DECENNIAL AVERAGES 1860-1869 to 1870-1879 AND QUINQUENNIAL AVERAGES 1880-1884 to 1970-1974[10]

PERIOD	WHITE	BLACK	PERIOD	WHITE	BLACK
1860-69	37.5	55.1	1925-29	21.0	27.3
1870-79	36.1	55.4	1930-34	17.8	24.3
1880-84	33.7	51.9	1935-39	17.2	22.9
1885-89	32.5	49.1	1940-44	19.6	24.5
1890-94	31.6	47.1	1945-49	22.5	27.6
1895-99	29.4	45.5	1950-54	23.2	30.6
1900-04	27.4	43.4	1955-59	23.1	31.5
1905-09	28.0	40.1	1960-64	21.4	23.8
1910-14	26.9	36.9	1965-69	17.2	22.8
1915-19	25.6	31.9	1970-74	15.2	23.0
1920-24	24.2	30.1			

FIGURE 9
FERTILITY RATES FOR WHITE FEMALES[11]



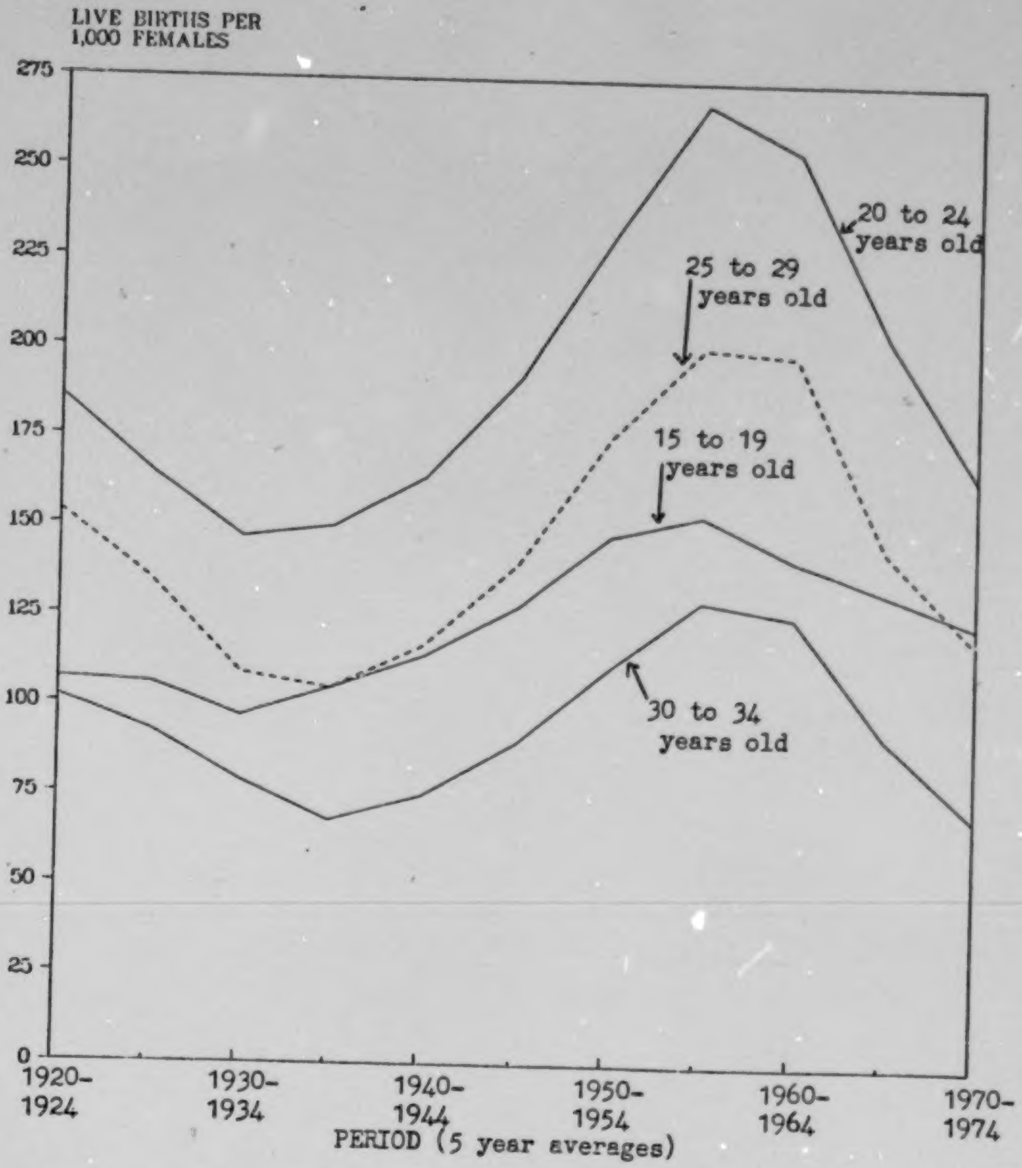
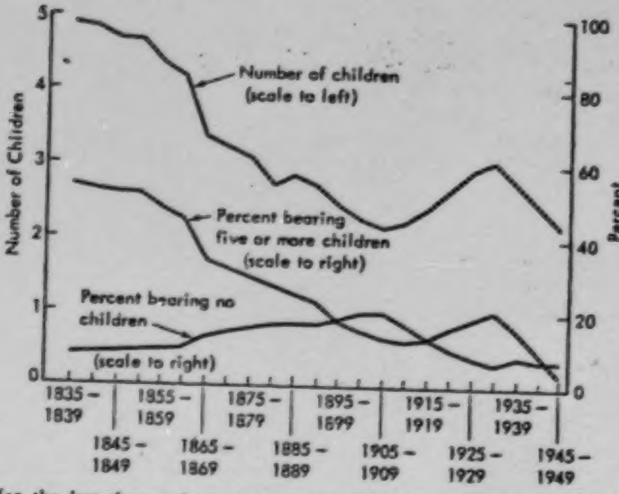


FIGURE 10
FERTILITY RATES FOR FEMALES OF BLACK AND OTHER RACES[12]

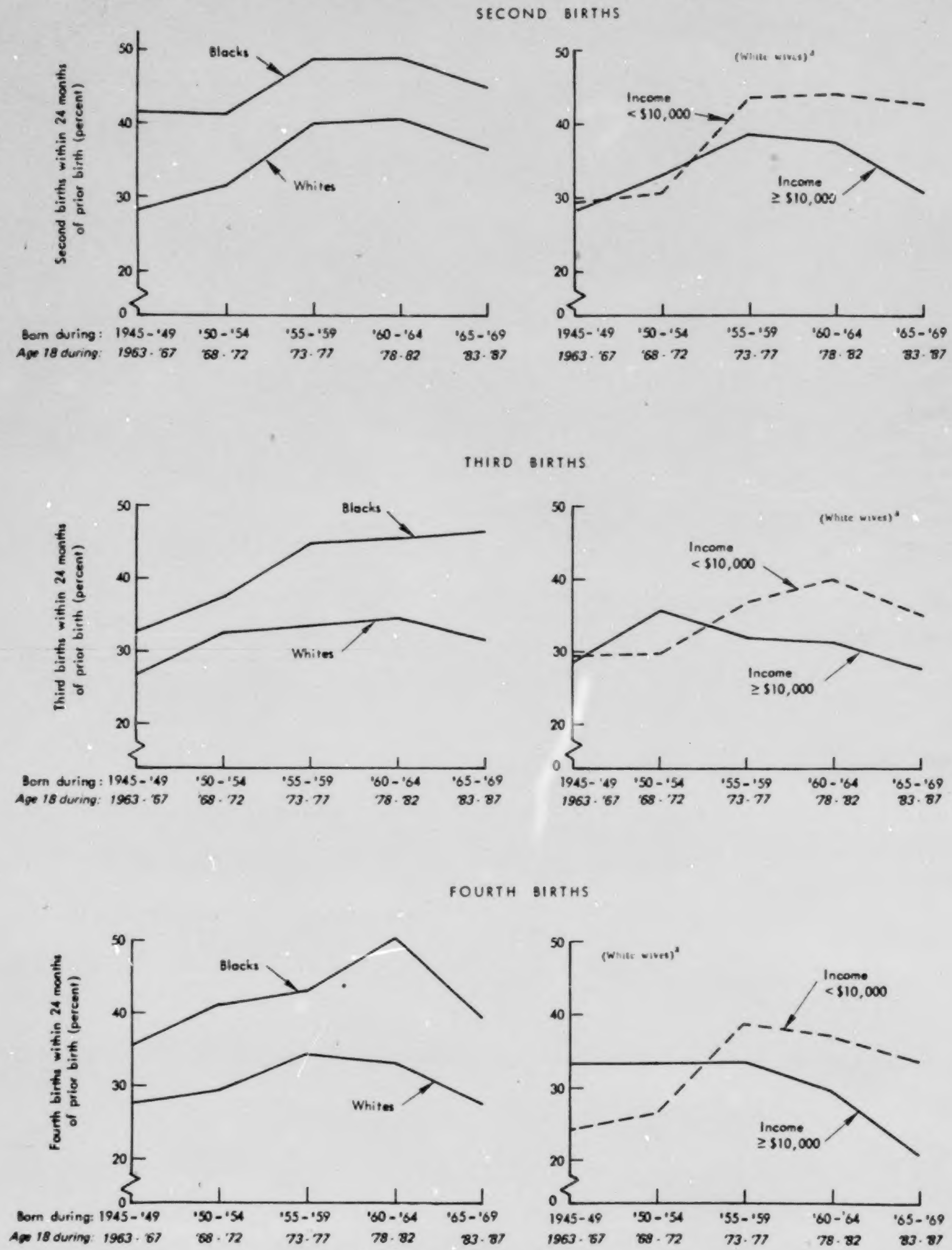
FIGURE 11

Fertility Measures for Birth Cohorts of White Women[13]



Data for the last three cohorts are estimates based on additional births expected according to a national sample survey.

FIGURE 12- Changing Incidence of Short Birth Intervals, by Race and Family Income[14]



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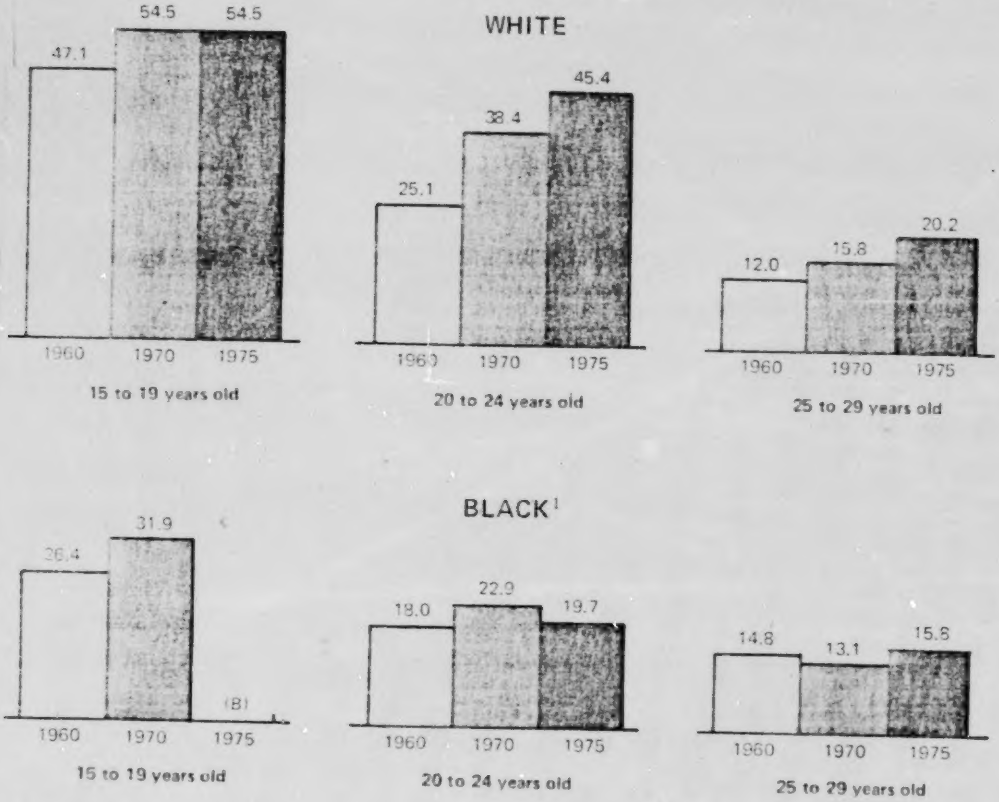
[a] Childspacing data by family income are available for white wives only.

FIGURE 13

Percent Childless Among Currently Married Women 1960, 1970, and 1975 [15]



B Base less than 75,000.

[1] Black and other races for 1960.

MORE ON SERIES II

While Series II is the most likely projection; there are variations on it which have some interesting implications. Two additional projections have been made using an eventual completed family size of 2.1, the Series II assumption, but introducing certain variations in other assumptions underlying the projections. These projections were intended to illustrate the result of certain trends which, although considered possible by demographers, are felt to be somewhat less likely than those assumed to underlie the Census Bureau Series II.

SERIES II L

Series II L is based on a later timing of births than Series II. It assumes a sharper decline in teenage births between 1974 and 2000 than does Series II and a substantial increase in births to women in their thirties. This would move the mean age of childbearing from about 26 to 28. The actual age specific fertility for 1974 and the two projected sets for 2000 are shown below:[16]

	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49
1974	1.2	59.9	116.1	106.8	52.7	21.4	5.3	0.4
2000 (II)	0.3	46.4	144.2	143.6	62.2	19.6	4.7	0.3
2000 (IIL)	0.2	24.6	99.8	149.9	102.5	31.8	4.9	0.3

The pattern of age specific fertility in Series II is similar to that of many moderate to low fertility European countries, including England, France and Belgium. These countries have historically had lower teen-fertility than the United States and somewhat later marriage. While it is certainly possible that the U. S. could move to that pattern, the Series II pattern seems somewhat more probable in the light of our past history and heterogeneous population. The age pattern of the decline in American fertility between 1960 and 1974 lends support to Series II as the following figures indicate.

Percent change in Age Specific Fertility Rates [17]

US 1960-1975

Age	% Change
15-19	-37
20-24	-56
25-29	-44
30-34	-53
35-39	-65
40-44	-70
45-49	-67
Total	-51

Series II L demonstrates the effect on annual fertility of a delay or stretching out of a cohort fertility. Annual fertility is lower under Series II L than under Series II because each cohort's contribution to the total of any one year is less.

SERIES II R

Series II R, while based on an eventual cohort fertility of 2.1:

> ...assumes that the completed cohort fertility rate will vary inversely with the size of the birth cohort before leveling off in the long run. This assumption contrasts with the move traditional approach which has the completed cohort fertility rate more smoothly to its assumed ultimate level. Interest in the relative cohort size concept stems from the observed inverse relation between cohort size and cohort fertility in recent decades and from recent research on the possible influence of relative cohort size on the social and economic experience of young couples (e.g., in the areas of education, occupation, and income) which in turn could influence their fertility behavior."[18]

It assumes that only cohorts of 3.8 million will have replacement level fertility. Cohorts of 4.2 million, like those of the later baby boom years, are expected to average 1.9 children, while the smaller cohorts of the early 1970's will average 2.2 to 2.4. Successive cohorts will tend to over- and under-shoot 3.8 million and thus have lower or higher completed fertility. The projections in this series oscillate.

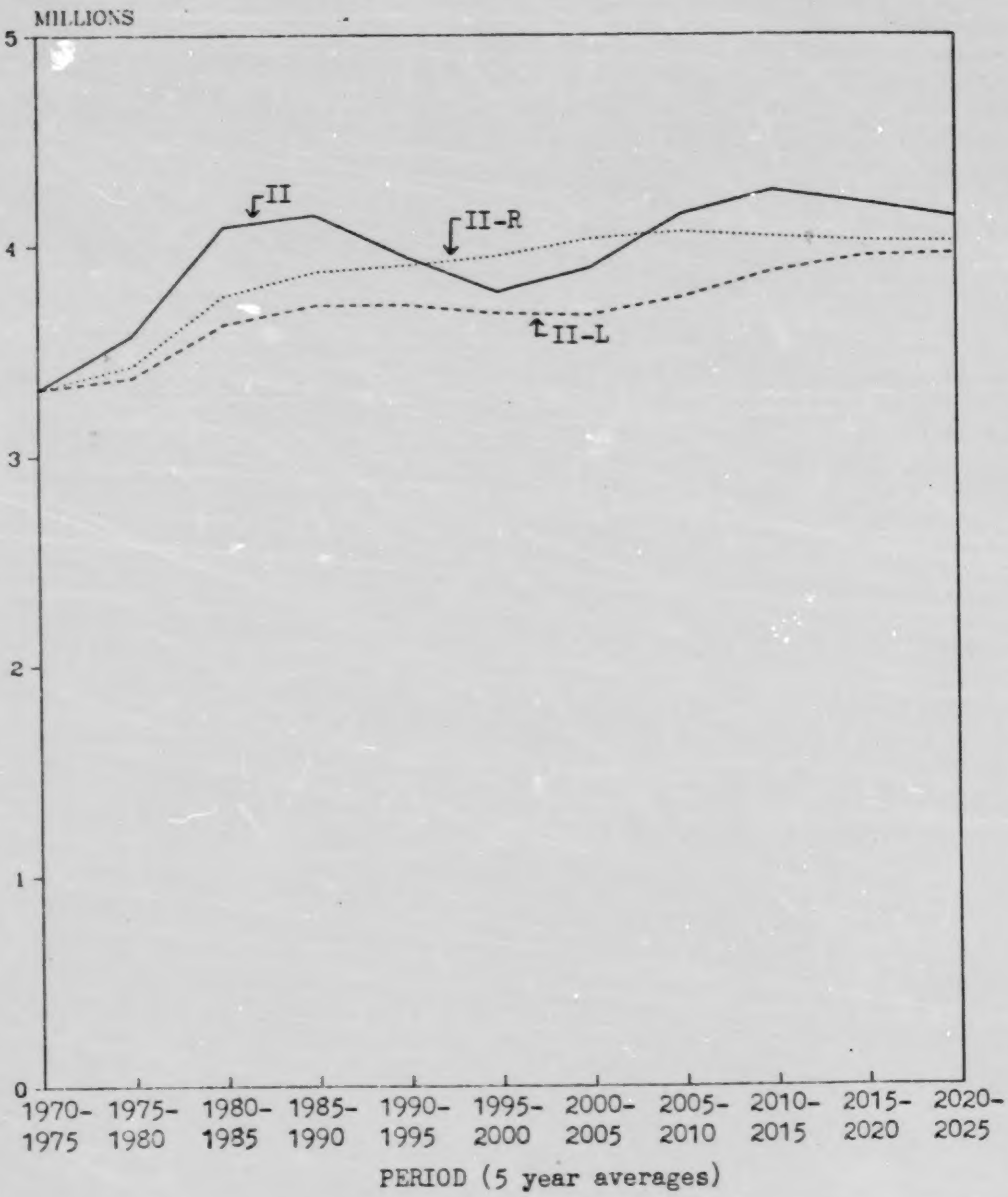
As shown in Table 6, the annual number of births in Series II R would increase to 3.6 million by 1980 and would reach 4 million by the end of the century. In contrast, the annual number of births would reach 4 million in the early 1980's under Series II. Figure 14 shows the relation of the several Series II projections.

TABLE 6. PROJECTIONS OF THE AVERAGE ANNUAL NUMBER OF BIRTHS FOR SERIES II, SERIES II-L, AND SERIES II-R: SELECTED YEARS, 1974 TO 2025[19]

(In thousands)

Year (July 1-June 30)	Series II	Series II-L	Series II-R
1974-1975	3,178	3,172	3,163
1975-1976	3,285	3,240	3,234
1976-1977	3,425	3,310	3,333
1977-1978	3,575	3,377	3,435
1978-1979	3,720	3,440	3,528
1979-1980	3,865	3,498	3,611
1980-1985	4,088	3,626	3,761
1985-1990	4,146	3,717	3,875
1990-1995	3,949	3,719	3,906
1995-2000	3,783	3,678	3,951
2000-2005	3,894	3,670	4,032
2005-2010	4,148	3,754	4,066
2010-2015	4,262	3,877	4,042
2015-2020	4,203	3,949	4,022
2020-2025	4,138	3,961	4,018

FIGURE 14. BIRTHS BY PATTERN OF COHORT FERTILITY: SERIES IIR, SERIES IIL[20]



SERIES II OR II L OR II R?

A society in which all women are highly motivated to limit themselves to two children will fall short of replacement since not everyone finds him or herself in a position to have children and not everyone is capable of having two children. However, insofar as some couples will probably want more than two, it is assumed that most cohorts will approach replacement level fertility (2.1).

Current cohorts of young women show signs of adopting this pattern. Recent survey data collected by the Bureau of the Census on the birth expectations of young wives aged 18 to 24, show that 58 percent expected just two children -- nearly 75 percent expected 2 or fewer. If these young wives do achieve their expectations, and other fertility surveys have shown a fairly close connection between the number of children women say they want and how many they eventually have, then they will experience 2.17 births per woman, on the average. Since women who are married at 18 to 24 tend to have more children than the cohort average, this works out, after the appropriate adjustment, to just about replacement fertility.

At present, it appears that the increasing acceptance of the rights of women to give priority to individual, non-familial interests, combined with a lessening of economic opportunity, will lead to replacement level fertility -- the Census Bureau's Series II, or some variant thereof for the current cohort of young women.

D. Expected Enrollment Trends Assuming Series II Fertility

Enrollments in Elementary Schools

As mentioned previously, the projection of enrollments beyond the early 1980's depends increasingly on the level of fertility assumed. All three assumed fertility levels discussed above result in the 10 percent decline in the population 5-13 years old between 1975 and 1980 (shown in Table 7 and Figure 15) since most of the children who will be in that cohort in 1980 had already been born when the projections were made. Thereafter, the projections diverge sharply. At the higher level of fertility (2.7 per woman), that age group (5-13) would increase 51% between 1980 and 2000, from approximately 30 million to nearly 46 million. Even under these conditions of rapid growth, the total of 1985 would be slightly under that of 1975; subsequent increases would be more rapid.

At the lower level of fertility (1.7 per woman) there would be a small net decline in those 20 years. This level of fertility would result in continued decline to 1985, then a return to the 30 million level of 1980 in the 1990's, declining again to 29 million by 2000.

The intermediate family size of 2.1 children would generate an increase in children at the kindergarten through eighth grade level which would peak at close to 37 million in 1995, (about the level of 1970), after remaining at about 30 million through most of the 1980's. By 2000, that group would be about 8 percent more numerous than it had been in 1975, or a little less than it had been in the peak years around 1970. The later pattern of childbearing (Series II L, 2.1

TABLE 7

Estimates and Projections of the Population by Selected Ages: 1950 to 2000[21]

Ages 5-13

Year	Series I	Series II	Series IIL	Series III,
1950	22,423			
1955	27,925			
1960	32,965			
1965	35,754			
1970	36,636			
1975	33,441			
1980	30,441	30,246	30,235	30,112
1985	33,330	30,380	29,378	27,954
1990	41,282	34,643	31,434	29,383
1995	45,728	36,799	32,868	30,320
2000	45,923	35,963	33,213	29,119

Table 7 (Continued)

Estimates and Projections of the Population by Selected Ages: 1950 to 2000

Ages 14-17

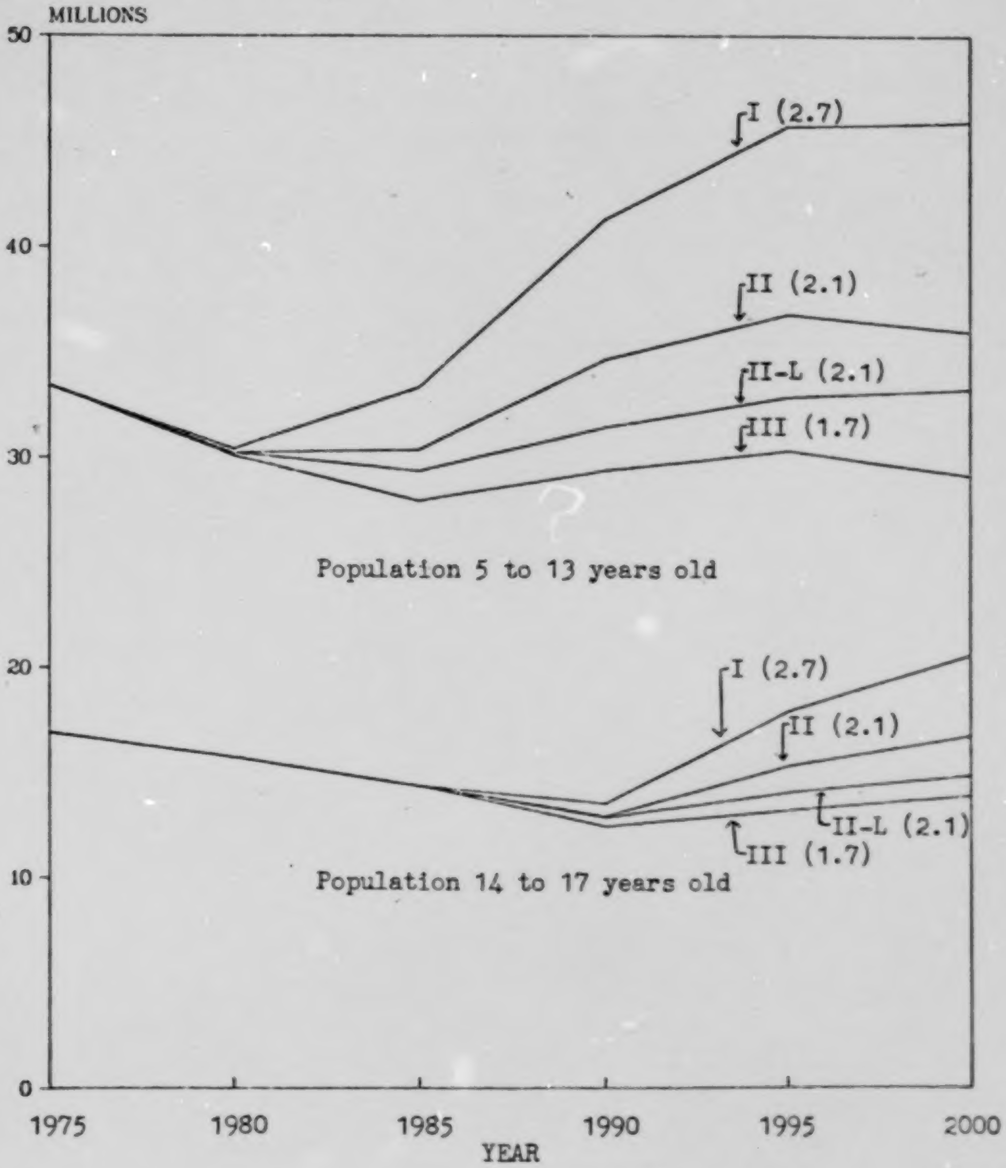
Year	Series I	Series II	Series IIL	SeriesIII
1950		8,444		
1955		9,247		
1960		11,219		
1965		14,153		
1970		15,910		
1975		16,923		
1980		15,753		
1985		14,388		
1990	13,538	12,941	12,879	12,463
1995	17,912	15,317	14,055	13,210
2000	20,575	16,752	14,873	13,915

children) would result in a steady decline to 29 million in 1985, and then an increase to 33 million by the end of the century.

Enrollments in Secondary Schools

Since persons who will be 14-17 years old in 1985 are already born, the 15 percent decline, from 16.9 to 14.4 million, in that age group (shown in Table 8 and Figure 15) is assured. A further decline to about 12 million in 1990 is also virtually certain. Thereafter, the different levels of fertility would begin to have some effect. If the higher level of fertility prevails there will be more than 20 million persons in this age group in 2000, 22 percent more than in 1975. If the lowest level occurs, there will be 18 percent fewer persons aged 14-17 in 2000 than there were in 1975. If families average the replacement level of 2.1, the sizes of this age group should be about the same in 2000 as in 1975. However, if the replacement level is achieved through later childbearing, the age group 14-17 would number about 14.8 million by the end of the century, about 12 percent lower than in 1975.

FIGURE 15. POPULATION PROJECTIONS BY ASSUMED LEVEL OF FERTILITY[22]



III. THE FAMILY

The traditional image of the family, the mother, father and several children, has been the underlying and often latent image of the American child's environment around which public policy has been framed. Increasingly, that model of the family is at at odds with reality. Rates of marriage, deferred marriage, increased divorce, and separation, as well as remarriage patterns, the size of households, the rates of their formation and the growing number of female-headed households are all radically changing the traditional environment of the child.[1] For example, it has been estimated that approximately 45 percent of children born in 1976 will have lived with a single parent for a significant period of time before they reach 18 years of age.[2]

These above changes, separately and together, have both direct and indirect implications for the school systems.

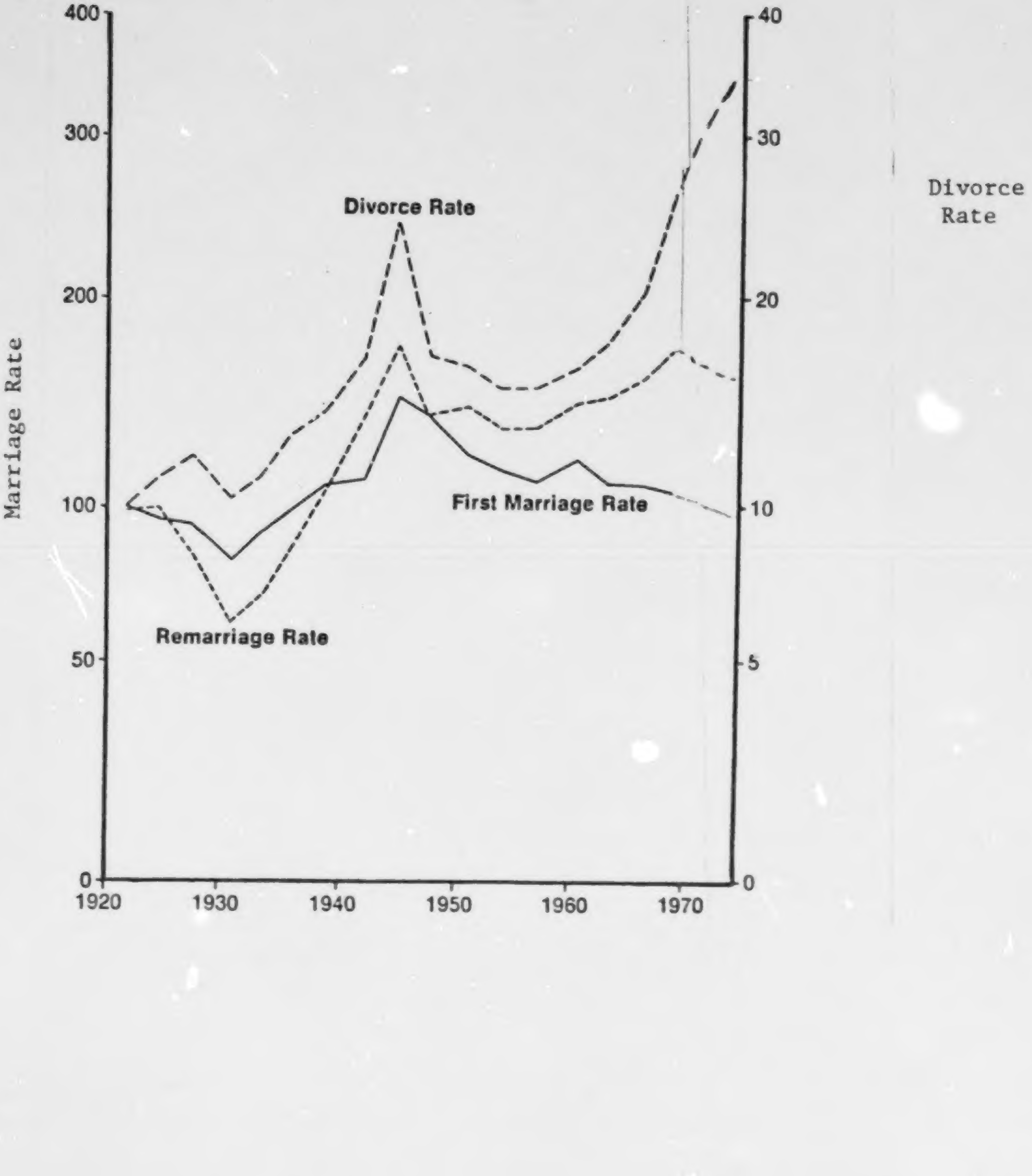
A. The Implications of Changing Family Demographic Patterns for Education

The structure, rate of formation, headship, age distribution, number of children and their legitimacy are likely to have a primary effect on the school system in terms of implicit needs as well as explicit demands for changes in curriculum and services in meeting the need of the child. These effects may be seen in terms of:

- The socialization of children which may be influenced to a significant degree by marriage, divorce, separation, single parenthood, and the shifts of the size of the family.

FIGURE 16

FIRST MARRIAGE RATES PER 1,000 SINGLE WOMEN, DIVORCE RATES PER 1,000 MARRIED WOMEN, AND REMARRIAGE RATES PER 1,000 WIDOWED OR DIVORCED WOMEN: UNITED STATES, THREE-YEAR AVERAGES, 1921 TO 1971. [3]



- The amount of parenting time as influenced by the size of the family. On the one hand, smaller family size may tend to increase it. On the other hand delayed and deferred marriage and competing work and professional objectives of parents may reduce parenting time. The amount of parenting also will be influenced by whether there are one or two adults in the household.
- The degree of family concern and input to the child's education. Attitudes toward education will themselves be influenced by the educational level of the parents.
- The implicit need and explicit demand for services will almost certainly be greater and probably different for the non-conventional family.
- Patterns of maternity including the number and spacing of children may influence the mental and social development of the child and may impact the school significantly.
- Non-conventional family arrangements may influence the degree of volunteer services available to schools.
- In addition to the well-known problems of poverty in the traditional rural and urban poor, a new kind of poverty may be impacting on the school system. That is the poverty associated with divorce, separation and other family disruptions as it moves into and becomes a prominent feature of the middle class.

- Many of the trends marking a movement away from the conventional or traditional family are found to the greatest extent in metropolitan areas, particularly in central cities. These stress factors, creating latent and overt demands on the schools, may be hitting especially hard those school systems already in the most profound difficulty.

The family is decreasingly a dominant factor in child socialization. A child now entering the first grade may have been exposed to nursery school or day care. He may have been involved with Head Start or related programs, or have had extensive exposure to television. The size of his sib-ship (the total number of children in his family) is different from what it had been for children born ten years ago. Roles of organized religious groups, grandparents, other members of the family and adults seem to be changing as agents of socialization. For those children raised in one-parent families, the amount of time spent with the parent is clearly diminished. There is frequently stress and almost always relative if not absolute poverty in such households. Limited income creates new demands and stresses as well as the need, if not the pressure, for compensatory public services.

In the same way that divorced and separated families promote single-family households, the substantial rise in the proportion of illegitimacy, particularly among the urban poor, condemns large numbers of children to environments of extreme financial poverty. As a general proposition, separation and divorce also engender poverty. The increase in working mothers is, in turn, creating pressures for day care, early nursery school, and other custodial services.

Therefore, in looking at the trends relating to families, one must keep these points of impact in mind. Further, one must be aware that even nationwide patterns vary to some degree within geographic regions, socio-economic status, cultural, and ethnic background, and urban or rural environments.

As a general conclusion, documented below, the shifting patterns of families are promoting the need and the demand for new public services, many of which will accrue to the school. Among these are new compensatory curriculum developments and an expanding repertoire of school services that compensate for transient or longer term home deficiencies.

It might also be noted that the pattern of deferred marriage causes many women to enter the work force early, and to continue in the work force even during childbearing years. This further compounds the complexities of the school situation. Finally, it should be noted that while there is currently much turbulence in the family environment, with changing attitudes toward divorce and living arrangements, the search for an adequate family arrangement is still the overwhelmingly dominant theme in American life. This search usually leads directly into marriage but often indirectly to divorce and remarriage.[4]

That search can be stressful. Recent estimates have shown that one-third of recent marriages may end in divorce. The number of children raised in broken families will probably increase as a proportion of all children. The proportion of children living with both parents declined from 88 percent in 1960, to 83 percent in 1970, and reached 80 percent in 1976. Between 1970 and 1976 the number of children living with a divorced mother increased by two-thirds, and the number living with a single mother increased by about 40 percent.

B. Some Data on the Family

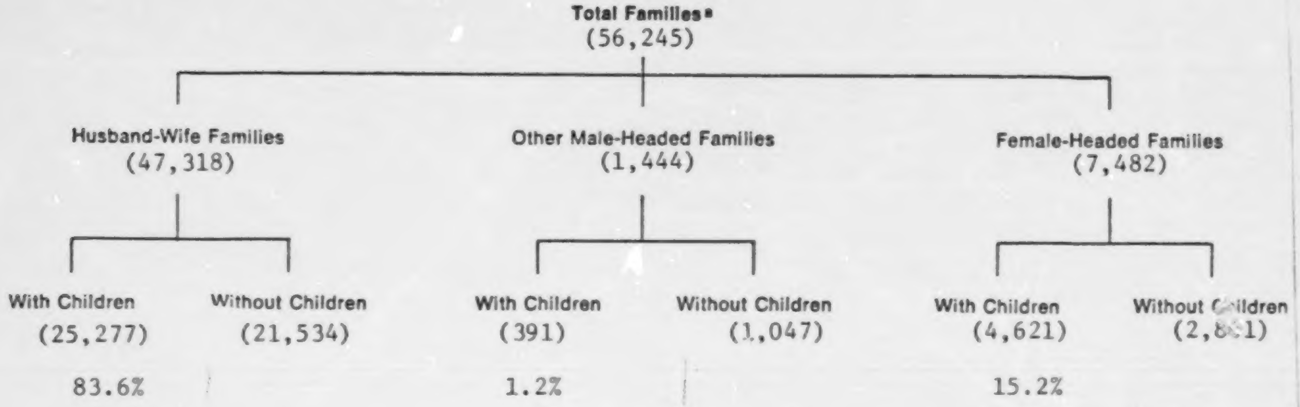
In 1976 there were 211 million Americans living in nearly 73 million households. In these households lived 56 million families. The overwhelming number, some 47 million of them, were husband and wife families. There were a small number of other male-head families (1.4 million) and 7.5 million families headed by females (Figure 17).

Thirty million one hundred seventy-seven thousand families had children under the age of 18 and 26,000,000 of those families were husband/wife families. There were 446,000 male-headed families and 4.6 million female-headed families. In 1976, 84 percent of the children were living in husband/wife families and 15 percent in female-headed families.

FIGURE 17

DISTRIBUTION OF FAMILIES BY SEX OF HEAD AND PRESENCE OF CHILDREN, 1976[5]

(Numbers in thousands)


Total Families*
(56,245)
Husband-Wife Families
(47,318)
Other Male-Headed Families
(1,444)
Female-Headed Families
(7,482)
With Children
(25,277)
Without Children
(21,534)
With Children
(391)
Without Children
(1,047)
With Children
(4,621)
Without Children
(2,8[illegible]1)
83.6%
1.2%
15.2%

*Includes secondary as well as primary families.

Source: "Household and Families, By Type: March 1976," Series P-20, No. 296, Current Population Reports, Washington, D.C.: U.S. Bureau of the Census.

Note: In 1976, there were 72 million households. Of these, 16.8 million involved primary individuals, that is, individuals living alone or with other non-relatives. Over 56 million households were established for families.

TABLE 8

NUMBER OF CHILDREN UNDER 18 YEARS OLD
BY LIVING ARRANGEMENTS:
UNITED STATES, 1976, 1970, AND 1960[6]

(Numbers in thousands)

Living Arrangements	Years			% Increase	% Increase
	1976	1970	1960	1976/1960	1976/1970
All children under 18	65,129	69,523	64,310	1.3	- 0.6
Living with:					
2 parents	52,101	57,744	56,287	- 7.4	- 9.7
1 parent	11,121	9,318	5,832	90.75	79.37
Living with parent					
-Divorced	4,407(40)	2,660	1,339	229	65.7
-Married	4,026(36)	3,803	2,710	48	5.9
-Separated	3,366(30)	2,482	1,616	108	35.1
Widowed	1,531(14)	1,953	1,540	(-)1	(-)22
Single	1,157(10)	903	242	378	28.1
Other Arrangements	1,908(18)	2,461	2,191		

TABLE 9

NUMBER OF CHILDREN UNDER 18 YEARS OLD BY LIVING ARRANGEMENTS: UNITED STATES, 1976, 1970, AND 1960[7]

(Numbers in thousands)

Living arrangements	Years			Ratio		
	1976	1970	1960	1976/1960	1976/1970	1970/1960
All children under 18	65,129	69,523	64,310	1.01	.94	1.08
Living with:						
Two parents	52,101	57,744	56,287	.93	.90	1.03
One parent	11,121	9,318	5,832	1.91	1.19	1.60
Mother only	10,310	7,979	5,106	2.02	1.29	1.56
Divorced	4,017	2,419	1,210	3.32	1.65	2.00
Married	3,797	3,113	2,363	1.61	1.22	1.32
Separated	3,200	2,335	1,499	2.13	1.37	1.56
Widowed	1,357	1,651	1,311	1.04	.82	1.26
Single	1,139	797	221	5.15	1.43	3.61
Father only	811	1,339	726	1.12	.61	1.84
Divorced	390	241	129	3.02	1.62	1.87
Married	229	690	347	.66	.33	1.99
Separated	166	157	117	1.42	1.05	1.34
Widowed	174	302	229	.76	.58	1.32
Single	18	106	21	.86	.17	5.05
Other relatives only	1,476	1,619	1,559	.95	.91	1.04
Nonrelatives only[1]	432	842	632	.68	.51	1.33

[1] For 1976 excludes children living in institutions; in 1970, 247,000 lived in institutions.

TABLE 10

PERCENT DISTRIBUTION BY LIVING ARRANGEMENTS OF CHILDREN UNDER 18 YEARS OLD: UNITED STATES, 1976, 1970, AND 1960[8]

Living arrangements	Years			Ratio		
	1976	1970	1960	1976/1960	1976/1970	1970/1960
All children under 18	100.0	100.0	100.0	–	–	–
Living with:						
Two parents	80.0	83.1	87.5	.91[1/]	.96	.95
One parent	17.0	13.4	9.1	1.87	1.27	1.47
Mother only	15.8	11.5	7.9	2.00	1.37	1.46
Divorced	6.2	3.5	1.9	3.26	1.77	1.84
Married	5.8	4.5	3.7	1.57	1.29	1.22
Separated	4.9	3.4	2.3	2.13	1.44	1.48
Widowed	2.1	2.4	2.0	1.05	.88	1.20
Single	1.7	1.1	0.3	5.67	1.55	3.67
Father only	1.2	1.9	1.1	1.09	.63	1.73
Divorced	0.6	0.3	0.2	3.00	2.00	1.50
Married	0.4	1.0	0.5	.80	.40	2.00
Separated	0.3	0.2	0.2	1.50	1.50	1.00
Widowed	0.1	0.4	0.4	.25	.25	1.00
Single	0.1	0.2	0.0	–	.50	–
Other relatives only	2.3	2.3	2.4	.96	1.00	.96
Nonrelatives only[2/]	0.7	1.2	1.0	.70	.58	1.20

[1/] This ratio is the result of dividing 80.0 by 87.5.

[2/] For 1976 excludes children living in institutions; in 1970, 0.4 percent lived in institutions.

TABLE 11

CHILDREN LIVING WITH A CURRENTLY DIVORCED PARENT BY SEX OF PARENT AND AGE OF CHILD: UNITED STATES, 1976, 1970, AND 1960[9]

(Numbers in thousands)

Age of child and sex of divorced parent	Year			Ratio		
	1976	1970	1960	1976/1960	1976/1970	1970/1960
Children under 18 living with a divorced parent	4,407	2,660	1,339	3.29	1.66	1.99
Living with mother	4,017	2,419	1,210	3.32	1.66	2.00
Living with father	390	240	129	3.02	1.63	1.86
Percent of total	8.8	9.0	9.6	–	–	–
Children under 6	863	592	NA	NA	1.46	NA
Living with mother	811	557	NA	NA	1.46	NA
Living with father	52	35	NA	NA	1.49	NA
Percent of total	6.0	5.9	–	–	–	–
Children 6 to 17	3,546	2,067	NA	NA	1.72	NA
Living with mother	3,206	1,862	NA	NA	1.72	NA
Living with father	340	205	NA	NA	1.66	NA
Percent of total	9.6	9.9	–	–	–	–

There has been a striking change in these ratios since 1960. Compare 1960, 1970, and 1976 (Tables 8, 9, and 10). From 1960 to 1976, there was an overall 90.7 percent increase in the number of children living with one-parent families, a 7.4 percent decline in those living in two-parent families. There was an overall 1.3 percent increase in the total number of children.

The increase in non-white children living in one-parent families was 68 percent, compared to 35 percent for whites.

The source of this special situation of the one-parent family in 1976 is fourfold. Of one-parent children, 14 percent were living with widows, 40 percent with a divorced parent, 30 percent with a separated parent and 10 percent with a single parent (Table 11).

C. Age Patterns of Marriage

According to Taeuber and Sweet, in the 19th Century most women married between the ages of 18 and 23.[10] Gradually the age of marriage increased and reached a high point with that group of women born from 1865 to 1874 (Figure 18). Age of marriage since then has steadily declined so that the earliest marrying group of women in recent times were those born between 1935 and 1939, marrying usually in the late 1950's and early 1960's. The trend has now undergone another and even sharper reversal. Women born after World War II, entering the traditional age of marriage in the late 1960's and early 1970's have been delaying marriage beyond the teen-age years (Figure 18). This is strikingly illustrated in Table 12 in terms of percent of women ever married at selected age groups in 1960 and 1974. There is no concrete evidence that marriage is going out of style, but rather that it is being deferred--in part due to women's entry into the work force, in part in terms of completing an education, and in part as a reflection of a new social trend toward couples living together without marriage or while waiting until a decision is made to have children.

Taeuber and Sweet point out that the impacts of schooling on marriage at least in deferring marriage, result from:

- desire to complete the educational process (women who get married are more likely to quit school)
- changes in attitudes toward life style
- the effects of family background on attitudes and continued attendance at school

There has been a long-term shift in the population of children under 18 years old per family as shown in Figure 19. The smallest average population of this age group since1940 was in 1950, approximately 1.35 children per family. That rose to a peak in 1964-5, when it reached 1.45 children per family, and has since rapidly declined so that, in 1975, we are back to the 1950 ratio. Since this calculation

FIGURE 18

Age Pattern of Marriage for Birth Cohorts of White Women[11]

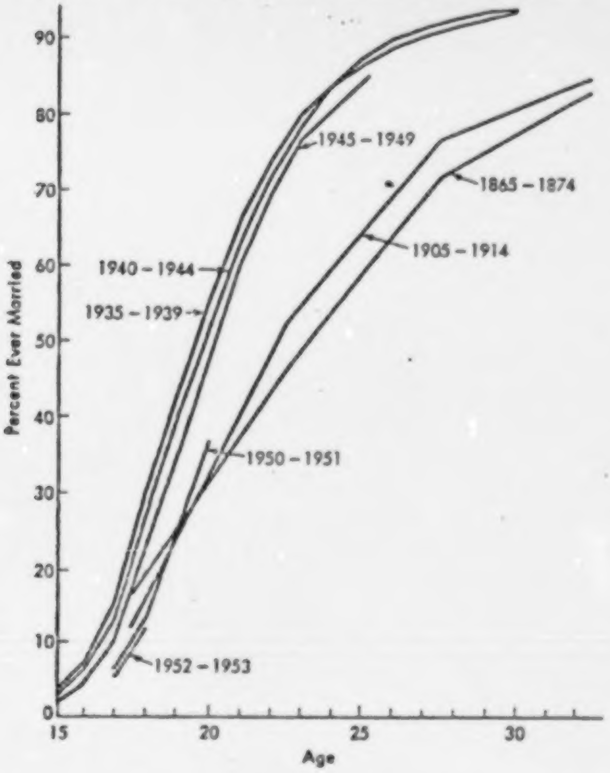


Table 12. Percentages of Ever Married Women at Selected Ages, 1960 and 1974[12]

TABLE 12

Age	*1960*	*1974*
18	24%	18%
20	54	42
22	74	62
24	84	77

FIGURE 19. AVERAGE POPULATION UNDER 18 YEARS OLD PER FAMILY: 1940 TO 1975[15]

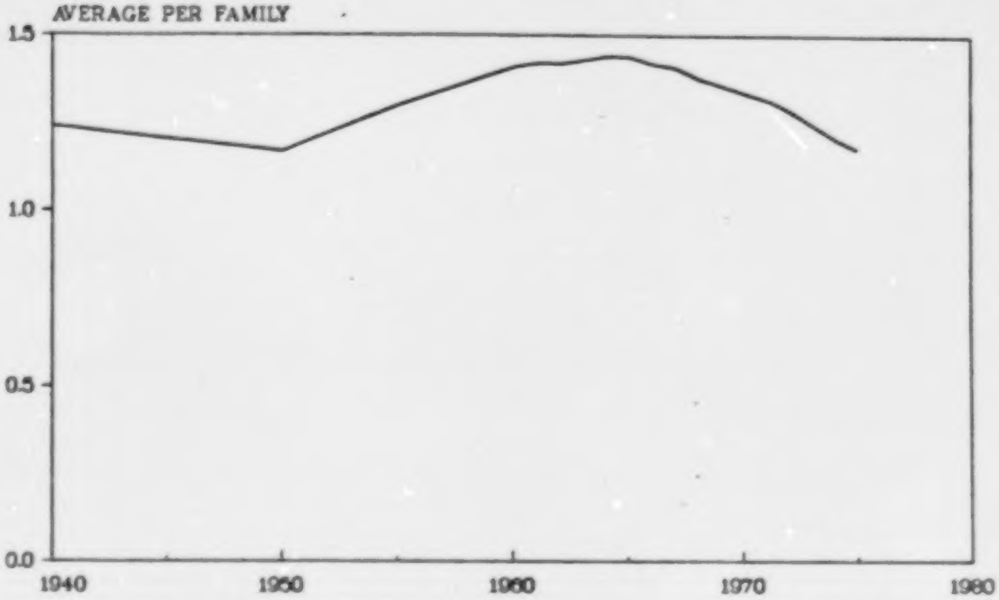


TABLE 13

Number of families and average number of own children under 18 years old, by type of family, labor force status of mother, and race, March 1970 and March 197416

Type of family, labor force status of mother, and race	March 1970		March 1974	
	Number of families with children under 18 years old (thousands)	Average number of children per family[1]	Number of families with children under 18 years old (thousands)	Average number of children per family[1]
ALL FAMILIES				
Husband-wife families	25,547	2.29	25,275	2.14
Mother in labor force	10,210	2.15	10,907	2.03
Mother not in labor force	15,337	2.37	14,368	2.23
Female family head	2,924	2.29	4,080	2.12
Mother in labor force	1,731	2.06	2,438	1.89
Mother not in labor force	1,193	2.63	1,642	2.46
WHITE				
Husband-wife families	23,285	2.25	22,887	2.12
Mother in labor force	8,970	2.10	9,565	2.00
Mother not in labor force	14,315	2.34	13,322	2.21
Female family head	1,994	2.05	2,731	1.95
Mother in labor force	1,237	1.88	1,742	1.79
Mother not in labor force	757	2.34	989	2.24
NEGRO				
Husband-wife families	2,001	2.67	2,020	2.35
Mother in labor force	1,120	2.51	1,160	2.24
Mother not in labor force	881	2.87	860	2.49
Female family head	912	2.77	1,289	2.46
Mother in labor force	485	2.48	671	2.12
Mother not in labor force	427	3.10	618	2.82

includes families with no children, the curve for families with children would average about one unit higher. The movement to smaller family size has effects on available child care and socialization, and involves shifts in attitudes and behavior. These all have implications for the school.

The average number of persons in a family has been decreasing since 1965 and should continue to decrease as fertility rates level off. "The average number of children per husband-wife family with children dropped from 2.29 in 1970 to 2.14 in 1974; the decline was of a similar degree for families headed by women (Table 13). As in past years, 1974 found fewer children, on the average, in families where the mother was in the labor force. This was the case whether the families were headed by men or women, and whether they were Black or white."[13]

D. Single Parent Families

Forty-five percent of children born in 1977 may expect to live in a single-parent situation before reaching the age of 18, according to a recent Census estimate.

This is shown in the calculation in Table 14 to be due to premarital births, divorce, separation and parental death. According to Norton,[14]

> In an historical context, the projection of 45 percent may be compared to estimates prepared by Mary Jo Bane and published in her book Here to Stay, American Families in the Twentieth Century. Bane estimates that about 29 percent of the children born during the period 1901 to 1910 were involved in a single-parent situation before they reached the age of 18. The differential between Bane's figure for children born 65 to 75 years ago and that projected for children born in 1977 may not seem particularly startling. However, when one examines the causal factors, some striking differences do become apparent. For example, the Bane estimate indicates that nearly eight out of every ten children who had lived with only one parent during the early part of this century did so because of the death of a father or a mother. By way of contrast, only seven out of every 100 children expected to be in a one-parent situation in the next 18 years live so because of the death of a parent. Conversely, divorce and long-term separation are expected to account for about 71 percent of the single-parent situations in the next 18 years as compared with accounting for only 20 percent of the single-parent situations among the children born in the 1901-to-1910 period. Premarital births accounted for one percent of the single-parent situations for the Bane group and for 22 percent in the projected estimate.
>
> ...not only can more children be expected to live with only one parent in the near future than in the past, but the children will very likely be much younger when they experience this situation than their early twentieth century counterparts.

The number of husband/wife households has been steadily rising since 1950, and reached a level of some 46 million households of that type in 1974, amounting to an approximate 20 percent increase in husband/wife children households since 1950. However, the growth of female-headed households with children, covering some 4 million in 1974, increased over 250 percent in the same time period (Figure 20).

TABLE 14

"Methodological Approach to Longitudinally Projecting the Porportion of Children Born in 1977 Who May be Expected to Spend Some Meaningful Length of Time in a Single-Parent Situation Before Reaching the Age of 18--and Related Discussion"[17]

This calculation was made on the basis of a consideration of trends in premarital births, divorce, long-term separation, and death (as they apply to a parent or parents). These four components were treated as being mutually exclusive and were applied to an hypothetical 100 babies born in 1977.

The following is a step-by-step description of the method of computation:

(1) Premarital births.--Currently the estimated illegitimacy rate is 14 percent of all births. Since about 90 percent of premaritally born children are retained by their mother and since about 80 percent of the mothers remain unmarried for 1 year or more after the premarital birth, about 10 percent of the original 100 babies would live in a single-parent situation for at least 1 year (e.g. 14 X .9 = 12.6 X .8 = 10.1).

(2) Divorce.--Through step (1) the original group of 100 had been reduced to 90 (the 4-percent premaritally born children [14 percent minus 10 percent from step (1)] were added back into the eligible universe on the assumption that nearly all of them would eventually be in two-parent families by virtue of the mother's marriage or through adoption). The most recent estimate of the proportion of first marriages to young adults that may eventually end in divorce is about 35 percent. However, because this estimate is upwardly influenced by persons who had borne a child before marriage and by childless couples, a reduction to 30 percent seemed reasonable. Thus, 30 percent of the remaining 90 children yields an estimated 27 percent of the original cohort of 100 children.

(3) Separation.--This is the most difficult component to estimate since many separations end in divorce (included in (2) above) and many are short-term ending in reconciliation. However, existing data indicate that long-term separations that either end in reconciliation or last indefinately would affect about 5 percent of the original 100 children.

(4) Death of a parent.--The most straightforward approach to determining the probable impact of this component on the chances of a child living in a single-parent situation was to use a life table to estimate the joint survival rates of men and women based on the average age of women at childbearing (26 years old) and increasing the age of men by 2 years (28 years old). This approach indicated that about 8 percent of all men and women would not survive jointly for the next 18 years. However, since the life tables available were not stratified by marital status, the 8-percent level was reduced to 6 percent on the assumption that married persons have somewhat greater longevity than nonmarried persons. The 6-percent estimate was then applied to the remaining 58 eligible children (derived by subtracting those estimated to have been involved in a single-parent situation because of (1) - (3) above) giving an estimate of 3 percent of the original 100 babies.

(5) Final estimate.--This was obtained by summing the results of steps (1) 10 percent, (2) 27 percent, (3) 5 percent, and (4) 3 percent to achieve the final 45-percent estimate. Given recent trends in the components used and understanding the tenuous nature of speculating about the future, this appears to be a reasonable estimate.

April 8, 1977

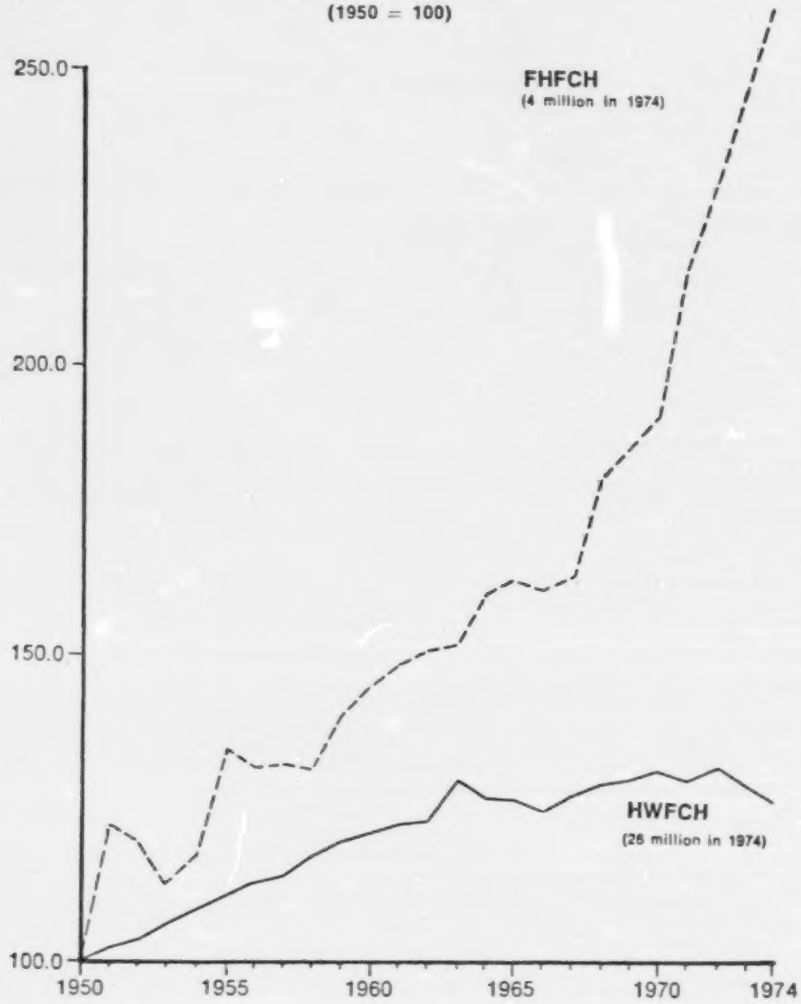
RESEARCH NOTE

Arthur J. Norton
Population Divis

FIGURE 20

GROWTH OF FEMALE-HEADED FAMILIES WITH CHILDREN (FHFCH) AND HUSBAND-WIFE FAMILIES WITH CHILDREN (HWFCH) 1950-1974[18]

(1950 = 100)



The same data are illustrated in the pie chart, Figure 21 and the detail in Table 15. The striking increase of female-headed households among Blacks is shown in Figure 22.

The underlying cause of the growth of single-parent families is in part illustrated in Figure 16 which shows the increase in divorce rate and relative lag in remarriage rate particularly for women. It is also worth noting, incidentally, that the rate of first marriage has been declining since the late 1940's but is roughly equal to the pre-World War II, post-Depression rates.

The relationship between numbers of divorces and numbers of children involved in divorce is shown in Figure 23 from a recent National Research Council study. The same Figure shows the rates of children involved in remarriage of divorced parents. The difference between those two curves suggests the number of children at any one time and in a single-parent family as a result of divorce and the delay in remarriage.

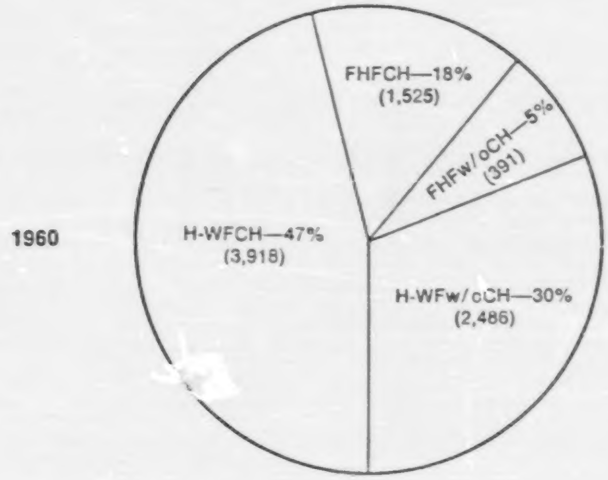
A more detailed look at the marriage dissolution rates is shown in Table 16.

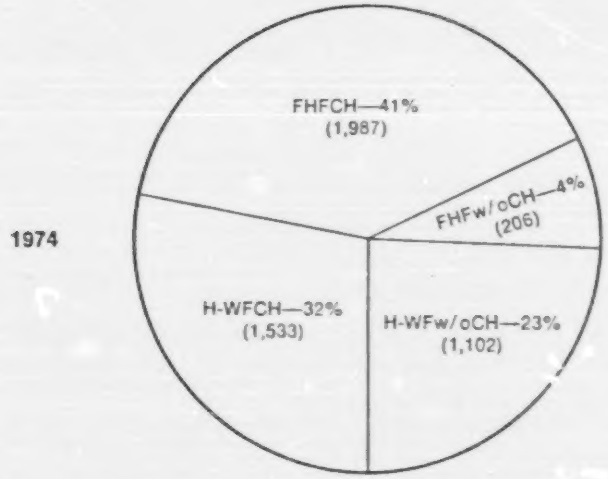
E. Single Parent Families are Impoverished

The profound influence and the change in the pattern of single-family headedness on relative poverty can be seen graphically in Figure 24, which shows the change from 1968 to 1974 in the percent of families of various income levels in female-headed households in relation to all families. So for example, in 1974 the overwhelming majority, about

FIGURE 21

PROPORTION OF FAMILIES BY FAMILY TYPE LIVING IN POVERTY, 1960-1974* [19]





*Actual number of families in thousands in parentheses.
FHFCH = Female-Headed Families with Children under 18.
H-WFCH = Husband-Wife Families with Children under 18.
w/oCH = without Children.

FIGURE 22.
FEMALE HEADED FAMILIES AS PROPORTION OF ALL FAMILIES BY RACE: 1955 TO 1975[20]

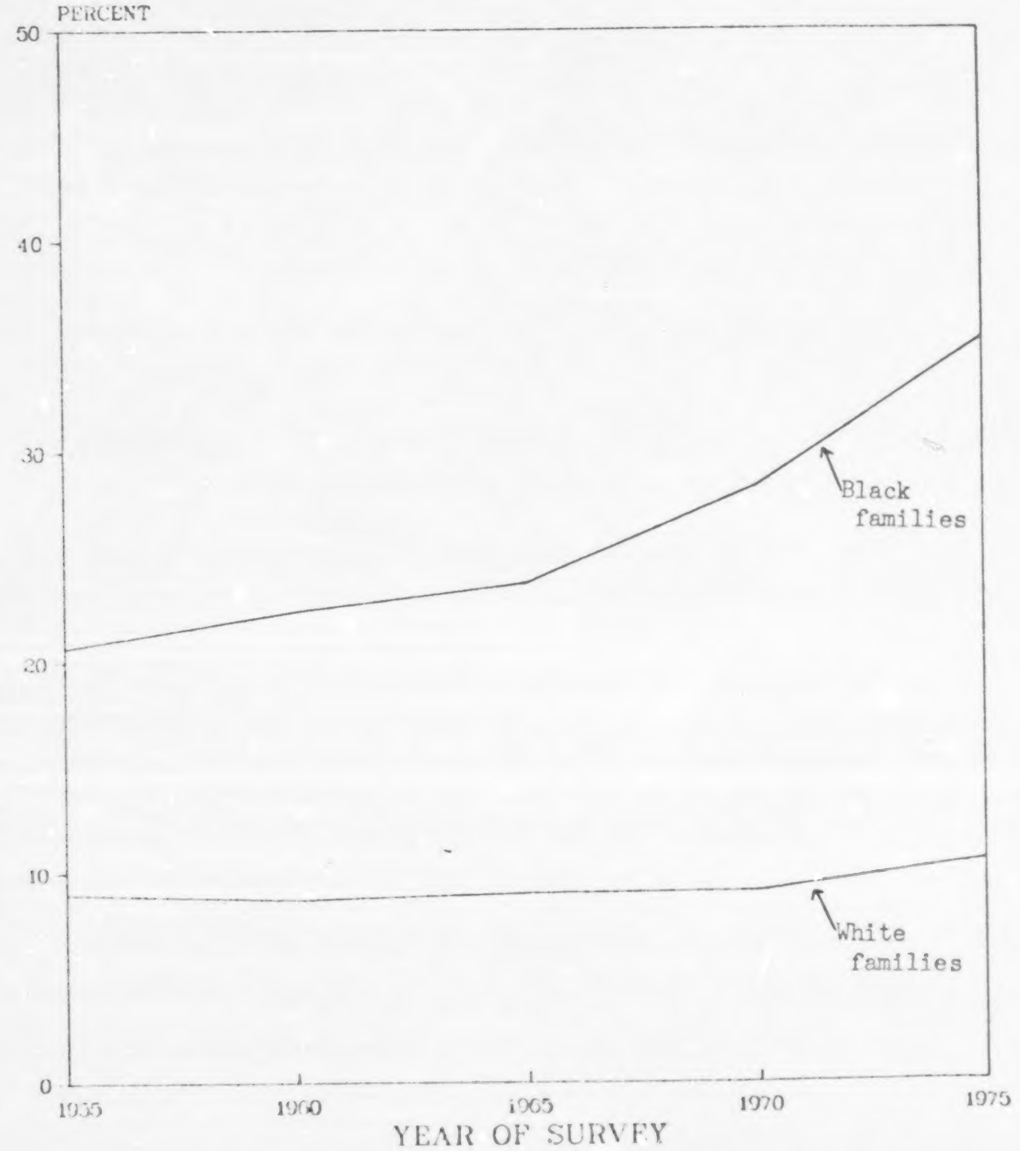


TABLE 15

TOTAL HOUSEHOLDS, 1940-1974 [21]

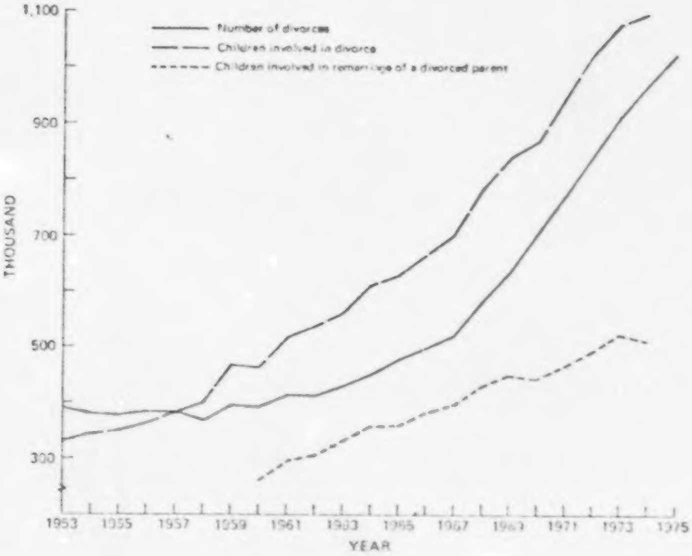
(Numbers in thousands)

		PRIMARY FAMILY HOUSEHOLDS						OTHER HOUSEHOLDS			
		Husband-Wife		Male Head		Female Head		Male Primary Indv.		Female Primary Indv.	
	TOTAL	No.	% of Total HH	No.	% of Total HH	No.	% of Total HH	No.	% of Total HH	No.	% of Total HH
July 1940	34,949	26,571	76.0	1,510	4.3	3,410	9.8	1,599	4.6	1,859	5.3
March 1950	43,554	34,075	78.2	1,169	2.7	3,594	8.3	1,668	3.8	3,048	7.0
April 1951	44,656	34,378	77.0	1,161	2.6	3,974	8.9	1,731	3.9	3,438	7.7
April 1952	45,504	35,138	77.2	1,138	2.5	3,959	8.7	1,756	3.9	3,543	7.8
April 1953	46,334	35,560	76.7	1,205	2.6	3,753	8.1	1,892	4.1	3,952	8.5
April 1954	46,893	35,875	76.5	1,313	2.8	3,751	8.0	1,904	4.1	4,028	8.6
April 1955	*47,874	36,251	75.7	1,328	2.8	4,153	8.7	2,059	4.3	4,083	8.5
March 1956	*48,902	37,067	75.8	1,418	2.9	4,157	8.5	2,058	4.2	4,250	8.7
March 1957	*49,673	37,702	75.9	1,242	2.5	4,322	8.7	2,038	4.1	4,374	8.8
March 1958	*50,474	37,906	75.1	1,262	2.5	4,240	8.4	2,329	4.6	4,718	9.3
March 1959	*51,435	38,422	74.7	1,286	2.5	4,269	8.3	2,449	4.8	5,015	9.8
March 1960	*52,799	39,254	74.3	1,228	2.3	4,435	8.4	2,716	5.1	5,179	9.8
March 1961	*53,464	39,531	73.9	1,226	2.3	4,541	8.5	2,832	5.3	5,333	10.0
March 1962	54,652	40,339	73.8	1,265	2.3	4,581	8.4	2,927	5.4	5,540	10.1
March 1963	55,189	40,838	74.0	1,296	2.3	4,679	8.5	2,845	5.2	5,531	10.0
March 1964	55,996	41,257	73.7	1,202	2.1	4,819	8.6	2,961	5.3	5,757	10.3
March 1965	57,251	41,588	72.6	1,168	2.0	4,964	8.7	3,271	5.7	6,260	10.9
March 1966	58,092	42,060	72.4	1,165	2.0	4,944	8.5	3,292	5.7	6,631	11.4
March 1967	58,845	42,489	72.2	1,185	2.0	5,117	8.7	3,408	5.8	6,646	11.3
March 1968	60,446	43,267	71.6	1,194	2.0	5,273	8.7	3,661	6.1	7,049	11.7
March 1969	61,805	43,818	70.9	1,217	2.0	5,381	8.7	3,893	6.3	7,490	12.1
March 1970	62,875	44,408	70.6	1,209	1.9	5,493	8.7	3,971	6.3	7,794	12.4
March 1971	64,374	44,704	69.4	1,250	2.0	5,869	9.1	4,385	6.8	8,166	12.7
March 1972	66,676	45,724	68.6	1,331	2.0	6,108	9.2	4,839	7.3	8,674	13.0
March 1973	68,251	46,297	67.8	1,432	2.1	6,535	9.6	5,129	7.5	8,858	13.0
March 1974	69,859	46,806	67.0	1,397	2.0	6,706	9.6	5,659	8.1	9,291	13.3
% Change since 1960:	32.3	19.2		13.8		51.2		108.4		79.4	

*Revised in 1965 for consistency with revised estimates of the population.

Sources: "Household and Family Characteristics" Series P-20, nos. 233, 246, 258, and 276. *Current Population Reports*, Population Characteristics. Washington, D.C.: U.S. Bureau of the Census.
Abbott L. Ferriss, "Indicators of Trends in Status of American Women," New York: Russell Sage Foundation, 1971.

FIGURE 23



Number of divorces and estimated number of children involved in divorce and remarriage (in thousands), 1953–1975.[22]

TABLE 16

TRENDS IN MARITAL DISSOLUTION BY RACE AND PRESENCE OF CHILDREN, 1960-1970[23]

	Percentage of All Ever-Married Women		Percentage Point Change 1960-1970	Percent Increase in Number of Women, 1960-70
	1960	1970		
Divorced				
White	3.4	4.8	+1.4	59
Nonwhite	4.6	7.1	+2.5	66
Separated				
White	1.6	1.9	+0.3	34
Nonwhite	10.7	12.5	+1.8	26
Widowed				
White	14.6	15.7	+1.1	23
Nonwhite	17.8	18.6	+0.8	13
Divorced with Children				
White	1.2	1.8	+0.6	72
Nonwhite	1.6	3.1	+1.5	108
Separated with Children				
White	0.7	0.9	+0.2	50
Nonwhite	5.0	7.0	+2.0	51
Widowed with Children				
White	1.1	1.1	0.0	14
Nonwhite	2.5	2.9	+0.4	26

68 percent of all families earning under $4,000 with children under 18 were headed by females. In the mid-range of $8,000 to $10,000 about 18 percent of all such families were headed by females. But when one reaches somewhat higher income ranges--$10,000 to $12,000 or $12,000 to $15,000, only about five percent of such families are single female headed families.

One can see the same kind of effect illustrated in a different perspective by dividing all households into five categories by the size of income and relating this to the marital status and sex of the household head (Tables 17 and 18).

The effects of an unconvenional, broken and disrupted family on income is quite dramatically shown in Table 17. For all households headed by males the median income was $12,965 in 1973, a shade above the average for all families ($12,051). However, for female-headed families (headed by a full-time female working head), income was $8,795. The disparities are even more dramatic when one makes the racial comparisons. The average median income for male-headed households was $13,253; the full-time, white, working female had an income of $9,516. This is roughly comparable to the average income for families headed by a Black working male ($9,549). For Black female, full-time working heads, the median was $7,095.

If one views figures for 1973 for mean rather than median incomes, the differences are even more striking, as shown in Table 20.

TABLE 17. FIFTHS OF HOUSEHOLDS BY SIZE OF MONEY INCOME, BY SELECTED CHARACTERISTICS: 1969 AND 1974[24]

(Households as of March of the following year)

Selected characteristics	Total		Household income											
			Lowest fifth		Second fifth		Third fifth		Fourth fifth		Highest fifth		Top 5 percent	
	1974	1969	1974	1969	1974	1969	1974	1969	1974	1969	1974	1969	1974	1969
MARITAL STATUS AND SEX OF HEAD														
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Male head	76.4	78.9	43.3	46.9	68.4	72.6	83.9	86.6	91.3	93.1	95.3	95.4	96.3	96.1
Married, wife present	66.0	70.6	27.8	32.8	55.9	62.9	73.5	79.3	83.9	88.0	89.2	90.3	90.1	90.7
Married, wife absent	1.5	1.2	2.0	1.8	1.8	1.6	1.6	1.0	1.2	0.9	1.0	0.7	0.8	0.8
Separated	1.0	0.8	1.6	1.3	1.2	1.1	1.1	0.7	0.8	0.5	0.5	0.4	0.4	0.4
Other	0.5	0.4	0.4	0.5	0.6	0.5	0.5	0.3	0.4	0.4	0.5	0.3	0.4	0.4
Widowed	2.1	2.2	4.6	5.4	2.4	2.3	1.5	1.4	1.0	0.9	1.0	0.9	1.1	0.9
Divorced	2.3	1.5	2.6	1.8	2.5	1.8	2.7	1.7	2.0	1.1	1.6	1.0	1.8	1.1
Single	4.5	3.4	6.4	5.1	5.6	4.0	4.7	3.1	3.2	2.3	2.5	2.4	2.6	2.5
Female head	23.6	21.1	56.7	53.1	31.6	27.4	16.1	13.4	8.7	6.9	4.7	4.6	3.7	3.9
Married, husband absent	2.7	2.3	7.3	6.6	3.6	3.5	1.4	1.1	0.6	0.4	0.3	0.2	0.3	0.1
Separated	2.6	2.0	7.0	5.6	3.5	3.1	1.3	1.0	0.6	0.3	0.3	0.2	0.3	0.1
In Armed Forces	0.1	0.3	0.3	1.0	0.1	0.4	0.1	0.1	-	0.1	-	-	-	-
Other	0.4	0.6	1.2	1.3	0.5	0.7	0.2	0.4	0.1	0.2	0.1	0.1	0.1	0.1
Widowed	11.6	11.5	32.6	33.5	13.4	12.7	6.1	5.8	3.6	3.1	2.2	2.3	1.4	2.1
Divorced	4.6	3.3	7.8	5.7	7.6	5.6	4.4	2.9	2.1	1.4	1.1	0.8	0.9	0.5
Single	4.3	3.5	7.8	6.3	6.5	4.8	4.0	3.1	2.2	1.9	1.1	1.2	0.9	1.1

- Represents zero. X Not applicable.

[1] Data for 1974 are not strictly comparable with those for 1969. For details see page 6 of Series P-60, No. 84.

[2] The lower limits for occupation of head are $7,800, $11,800, $15,600, $20,800, and $33,200 respectively for 1974 and $5,800, $8,600, $11,300, $15,200, and $23,400 for 1969.

TABLE 18. HOUSEHOLDS BY TOTAL MONEY INCOME IN 1969 AND 1974. IN CONSTANT 1974 DOLLARS. BY SELECTED CHARACTERISTICS[25]

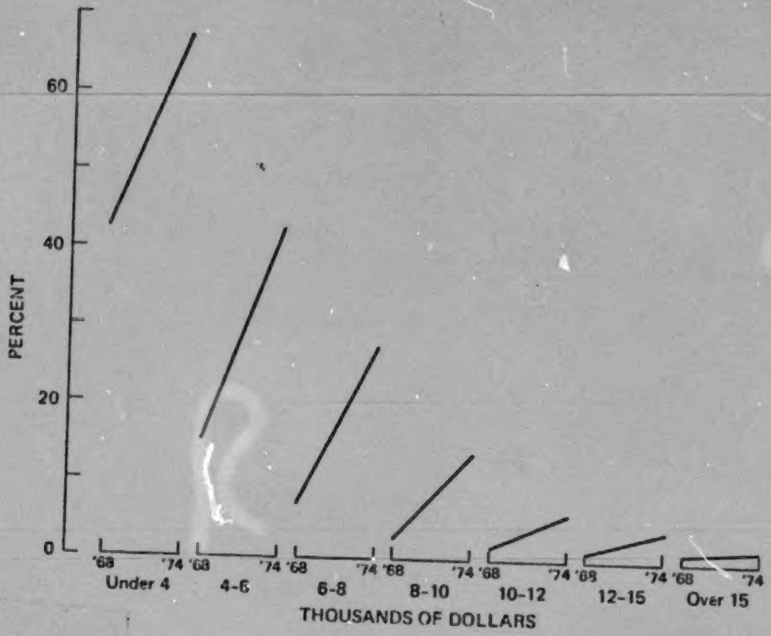
(Households as of March of the following year)

Selected characteristics	Total		Household income											
			Under $4,000		$4,000 to $6,999		$7,000 to $9,999		$10,000 to $14,999		$15,000 to $24,999		$25,000 and over	
	1974	1969	1974	1969	1974	1969	1974	1969	1974	1969	1974	1969	1974	1969
MARITAL STATUS AND SEX OF HEAD														
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Male head	76.4	78.9	39.3	45.1	63.5	66.2	71.7	78.7	86.6	89.5	93.4	93.2	96.4	95.9
Married, wife present	66.0	70.6	23.2	30.7	50.6	55.8	62.8	69.5	76.8	83.4	87.0	89.2	91.6	90.7
Married, wife absent	1.5	1.2	1.9	1.7	2.0	1.7	1.8	1.3	1.6	0.9	0.9	0.7	0.9	0.8
Separated	1.0	0.8	1.6	1.3	1.3	1.1	1.2	0.9	1.1	0.6	0.6	0.4	0.3	0.4
Other	0.5	0.4	0.3	0.4	0.7	0.6	0.6	0.4	0.5	0.3	0.3	0.3	0.6	0.4
Widowed	2.1	2.2	5.0	5.6	2.8	2.9	2.0	2.0	1.3	1.2	0.5	0.8	1.0	0.9
Divorced	2.3	1.5	2.7	1.8	2.4	1.6	2.6	2.0	2.7	1.4	1.7	1.0	1.6	1.1
Single	4.5	3.4	6.4	5.2	5.8	4.2	5.5	3.9	4.3	2.7	2.8	2.3	2.3	2.5
Female head	23.6	21.1	60.7	54.9	36.5	33.8	25.3	21.3	13.4	10.5	6.6	5.8	3.6	4.1
Married, husband absent	2.7	2.3	7.8	6.7	4.7	4.4	2.4	2.5	1.1	0.7	0.5	0.2	0.2	0.1
Separated	2.6	2.0	7.4	5.7	4.6	3.9	2.3	2.3	1.1	0.6	0.5	0.2	0.2	0.1
In Armed Forces	0.1	0.3	0.4	1.0	0.1	0.5	0.1	0.2	-	0.1	-	-	-	-
Other	0.4	0.6	1.1	1.1	0.5	0.8	0.4	0.6	0.2	0.3	0.1	0.1	0.1	0.1
Widowed	11.6	11.5	35.7	35.3	16.7	16.8	9.6	9.1	5.1	4.6	2.9	2.7	1.7	2.2
Divorced	4.6	3.3	7.7	5.7	8.0	6.1	6.8	4.0	3.6	2.3	1.5	1.1	0.8	0.5
Single	4.3	3.5	8.2	6.3	6.6	5.5	5.9	4.3	3.4	2.6	1.6	1.5	0.8	1.1

- Represents zero.

[1] Data for 1974 are not strictly comparable with those for 1969. For details see page 6 of Series P-60, No. 84.

FIGURE 24



Female-headed families as a percentage of all family heads under 65 with children under 18 by income in previous year, 1968–1974.[26]

TABLE 19. —MEDIAN INCOME OF FAMILIES, BY TYPE OF FAMILY AND RACE, 1973[27]

Selected characteristics	Median income of all families	Median income of families headed by year-round full-time workers
All families	$12,051	$14,614
Type of family (all races)		
Male head	12,965	14,965
Married, wife present	13,028	15,000
Wife in paid labor force	15,237	17,292
Wife not in paid labor force	11,418	13,675
Other marital status	10,742	13,453
Female head	5,797	8,795
Type of family (head of household white)		
Male head	13,253	15,305
Married, wife present	13,297	15,353
Wife in paid labor force	15,654	17,586
Wife not in paid labor force	11,716	13,911
Other marital status	11,585	13,907
Female head	6,560	9,516
Type of family (head of household black)		
Male head	9,549	11,730
Married, wife present	9,729	11,776
Wife in paid labor force	12,266	13,817
Wife not in paid labor force	7,148	9,297
Other marital status	6,767	10,415
Female head	4,226	7,095

Table 20.—MEAN FAMILY INCOME IN 1975 OF FAMILIES WITH ONE OR MORE OWN CHILDREN UNDER 18 YEARS OLD, BY TYPE OF FAMILY

Age of Head	Husband-Wife Families	Single-Parent Families	
		Male-Headed	Female-Headed
Under 25	$ 9,664	(B)	$3,871
25-44	17,008	$12,427	6,900
45-64	20,823	14,134	8,685

Source: "Money Income in 1975 of Families and Persons in the U. S.," Current Population Reports, Series P-60, No. 105, table 25, Washington, D.C.: U. S. Bureau of the Census. Revised:4-28:77:MHenson

B Base less than 75,000.

As a general conclusion, female-headed households are in poverty. Presumably, any factors leading to the dissolution in the family or promoting single-parentness will carry more children into poverty. A recent HEW report points out that "...absence of the father from the home was the basis of eligibility for 83 percent of the children, an increase of three percentage points over 1973. About three-fourths of AFDC families were headed by a woman."[29]

The impacts of divorce on family poverty can be appreciated from a recent study covering a national sample of 5,000 families for the years 1968-73, at the Urban Institute by Sawhill, Jones and Gordon:

- o About 40 percent of all divorced, separated, or single women do not receive any financial assistance from the father of their children. The remainder receive help only irregularly and in very small amounts.
- o Less than 1/5th of men earning less than $3,710 (in 1973) ever pay anything.
- o Three-fourths of men with incomes above $11,000 contribute to the children's upkeep. For men earning over $7,000 child-support averages 12 percent of their income per year.
- o For absent fathers with a history of rendering support, the average payment per family was about $2,000 in 1973.
- o The national sample of 5,000 families in 1973, 55 percent of eligible families received nothing, 20 percent received less than $1,000; 14 percent less than $3,000; 9 percent less than $5,000, and 2 percent $5,000 or more.

TABLE 21

Percent of Children Under 18 Years Old in Poverty Families: 1967 to 1976[30]

	White		Black and All Other Races		Black	
	Number Below Poverty	Percent Below Poverty	Number Below Poverty	Percent Below Poverty	Number	Percent
1967	6,729*	11.3	4,698*	44.9	4558	47.4
1968	6,373	10.7	4,366	41.6	4188	43.1
1969	5,667	9.7	3,834	37.7	3677	39.6
1970	6,138	10.5	4,097	39.6	3922	41.5
1971	6,341	10.9	4,003	38.7	3836	40.7
1972	5,784	10.1	4,298	41.3	4025	42.7
1973	5,462	9.7	3,991	38.3	3822	40.6
1974**	6,079	11.0	3,888	37.1	3713	39.6
1975	6,748	12.5	4,134	38.9	3884	41.4

* In thousands, in specified groups.
**Based on Revised Methodology
Beginning with 1969, data are based on 1970 census population controls; therefore, not strictly comparable to date for earlier years.

Source: 1)Bureau of the Census. Characteristics of the Low-Income Population: 1973 (Advance Report). Table 1.

2) Bureau of the Census. Money Income and Poverty Status of Families and Persons in the United States: 1974 (Advance Report). Table 17.

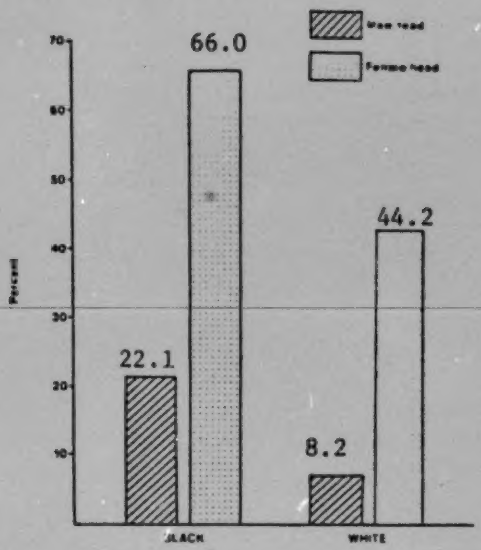
F. Children in Poverty

A direct comparison can be made of the percentage of children living in poverty level families in 1967 and 1975. Considering white families in 1967, 11.3 percent were in poverty; in 1975, 12.5 percent (Table 21).

When one looks at Blacks during comparable periods, 44.9 percent of children below age 18 were living in poverty level families, whereas in 1975, 41.4 percent were.

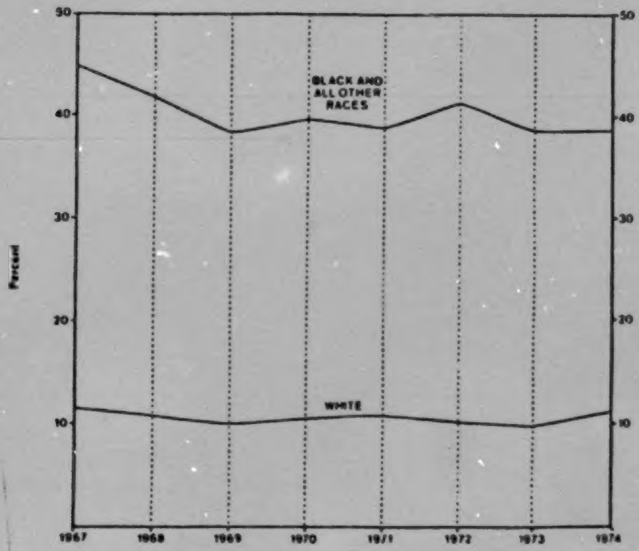
Such a table is cause for optimism and pessimism. The clear and unequivocal improvement in incomes for Black and white families is paralleled by a slight shrinkage in the relative difference between the white and Black percentages of children in poverty through 1974. The gap widened again in 1975. The fact remains, however, that on a percentage basis, somewhat over three times as many Black children are now living in poverty families and that is two out of every five Black children.

These data are illustrated graphically in Figures 25 and 26. The details are given in Table 22. The income comparisons between Blacks and whites have been generally established and widely recognized.



Percent of Children Under 18 Years Old in Poverty Families: 1975[31]

FIGURE 25



Percent of Children Under 18 Years Old in Poverty Families: 1967 to 1975[32]

FIGURE 26

TABLE 22

Percent of Children Under 18 Years Old in Poverty Families: 1974[33]

	Black			White		
	Number: All Income Levels	Number Below Poverty Level	Percent Below Poverty Level	Number: All Income Levels	Number Below Poverty Level	Percent Below Poverty Level
Male-Headed Families	5,314*	1,151*	21.7	49,054*	3,500*	7.1
Female-Headed Families	4,062	2,668	65.7	6,294	2,680	42.6

*Number in thousands, in specified group.

G. The Recent Census Survey of Income and Education

Education Amendments of 1974, in accordance with the official definitions in Title I of the Elementary and Secondary School Act of 1965, require that the Secretary of Commerce in collaboration the Secretary of Health, Education and Welfare conduct a survey to determine the poverty status. A special survey of each state was taken in the spring of 1976. The data are shown in Table 23. Based on these estimates, of the 49,211,000 children aged 5-17 in the United States, 7,132,000 are at the poverty level. These figures are somewhat at odds with the 1970 census data, both in terms of total numbers (568,000 fewer), as well as in details for 25 states (Table 24). However, overall, the pattern is clear and in agreement. Since however, this survey was conducted for purposes of implementing a funding formula, the detailed reliability becomes particularly critical. According to the Secretaries' (DOC and HEW) cover letter, the tables are preliminary and subject to further evaluation.

Since poverty is not an absolute but a relative concept, alternative poverty counts have been proposed and utilized by government. The report, Measures of Poverty, April 1976, suggests a modified schedule as shown in Table 25. The details of the poverty level cut-off proposed in 1975 (by sex of the family head, size of family, number of children, farm and non-farm residence) are shown in Table 26.

They also apply across these demographic family categories. On a percentage basis, more Black children than white children are in poverty. All negative family effects are enhanced for single-parent families, and on a metropolitan/nonmetropolitan basis for Blacks. As Black income is substantially less than white, race becomes a correlate with poverty and single-parent families. (Figure 27).

An interesting comparison and distribution of children in poverty can be seen by the comparison of these numbers as displayed in Table 27. While the differences are slight, they are not all in the same direction between the current and the alternative poverty levels.

H. The Deferred Marriage

Returning to Figure 18, the rate of first marriage can be seen for women in significant age groups. It is quite clear from these data that there is a tendency toward deferred marriage on the part of younger women. However, when one compares this situation with the expected

TABLE 23. PRELIMINARY ESTIMATES OF CHILDREN 5 TO 17 YEARS OLD IN FAMILIES BY STATE, BY POVERTY STATUS: 1975[34]

State	Total in Families	In Families Below Poverty Level				
		Number			Poverty Rate	
		Total	Standard Error		Percent Poor	Standard Error
			Number	Percent (C.V.)		
UNITED STATES........	49,211,000	7,132,000	123,800	1.7	14.5	0.3
Alabama..............	858,990	136,210	15,673	11.5	15.9	1.8
Alaska...............	95,590	6,150	952	15.5	6.4	1.0
Arizona..............	549,200	92,430	8,745	9.5	16.8	1.6
Arkansas.............	495,910	106,060	10,269	9.7	21.4	2.1
California...........	4,705,530	648,050	52,570	8.1	13.8	1.1
Colorado.............	600,390	64,090	7,632	11.9	10.7	1.3
Connecticut..........	704,150	59,190	5,675	9.6	8.4	0.8
Delaware.............	137,610	14,300	1,607	11.2	10.4	1.2
District of Columbia.	144,610	22,740	2,738	12.0	15.7	1.9
Florida..............	1,768,410	382,550	33,000	8.6	21.6	1.9
Georgia..............	1,193,880	254,660	25,543	10.0	21.3	2.1
Hawaii...............	204,480	19,540	2,131	10.9	9.6	1.0
Idaho................	205,130	22,530	1,690	7.5	11.0	0.8
Illinois.............	2,570,280	389,150	27,314	7.0	15.1	1.1
Indiana..............	1,257,960	120,440	11,218	9.3	9.6	0.9
Iowa.................	678,080	53,270	5,735	10.8	7.9	0.8
Kansas...............	499,660	42,750	5,184	12.1	8.6	1.0
Kentucky.............	793,940	170,230	16,497	9.7	21.4	2.1
Louisiana............	961,050	219,900	18,593	8.5	22.9	1.9
Maine................	253,130	38,690	3,658	9.5	15.3	1.4
Maryland.............	974,980	104,150	10,954	10.5	10.7	1.1
Massachusetts........	1,322,660	123,540	12,280	9.9	9.3	0.9
Michigan.............	2,230,860	251,710	19,549	7.8	11.3	0.9
Minnesota............	958,470	87,340	9,162	10.5	9.1	1.0
Mississippi..........	596,000	194,340	13,840	7.1	32.6	2.3
Missouri.............	1,070,580	157,040	15,870	10.1	14.7	1.5
Montana..............	181,960	22,760	2,079	9.1	12.5	1.1
Nebraska.............	356,640	36,100	4,004	11.1	10.1	1.1
Nevada...............	143,320	15,770	1,389	8.8	11.0	1.0
New Hampshire........	197,000	20,310	1,704	8.4	10.3	0.9
New Jersey...........	1,672,110	193,800	15,007	7.7	11.6	0.9
New Mexico...........	300,010	77,940	5,500	7.1	26.0	1.5
New York.............	3,992,870	524,020	42,785	8.2	13.1	1.1
North Carolina.......	1,244,490	221,210	24,445	11.1	17.8	2.0
North Dakota.........	155,410	17,820	2,059	11.6	11.5	1.3
Ohio.................	2,521,070	293,650	23,233	7.9	11.6	0.9
Oklahoma.............	596,900	86,990	10,213	11.7	14.6	1.7
Oregon...............	511,540	42,760	4,658	10.9	8.4	0.9
Pennsylvania.........	2,605,050	329,020	25,614	7.8	12.6	1.0
Rhode Island.........	205,790	21,520	2,166	10.1	10.5	1.1
South Carolina.......	692,700	165,700	14,510	8.8	23.9	2.1
South Dakota.........	164,830	21,660	2,969	13.7	13.1	1.8
Tennessee............	954,940	195,680	19,346	9.9	20.5	2.0
Texas................	2,890,460	591,720	37,255	6.3	20.5	1.3
Utah.................	316,310	25,270	2,724	10.8	8.0	0.9
Vermont..............	112,260	20,020	1,548	7.7	17.8	1.4
Virginia.............	1,138,750	155,750	17,012	10.9	13.7	1.5
Washington...........	809,070	81,290	8,245	10.1	10.0	1.0
West Virginia........	401,560	76,020	7,455	9.8	18.9	1.9
Wisconsin............	1,124,090	105,950	10,494	9.9	9.4	0.9
Wyoming..............	89,990	7,740	765	9.9	8.6	0.9

Source: Survey of Income and Education
U.S. Bureau of the Census

TABLE 24

NUMBER, PERCENT DISTRIBUTION, AND POVERTY RATES OF POOR CHILDREN 5 TO 17 YEARS OLD IN FAMILIES, BY STATE: 1970 CENSUS AND SIE[35]

Divisions, Regions, and States	Poor children 5 to 17 years old				Percent of United States poor		Poverty rate	
	1970 Census		SIE					
	Number	Standard error	Number	Standard error	1970 Census	SIE	1970 Census	SIE
UNITED STATES, TOTAL..	7,700,368	9,799	*7,132,000	123,330	100.00	100.00	14.8	14.5
NORTHEAST.......	1,247,028	3,797	1,330,110	52,230	15.21	*18.64	10.5	*12.0
New England..........	260,121	1,734	283,270	14,593	3.39	* 3.96	8.9	*10.1
Maine..............	36,308	636	38,690	3,558	0.47	0.54	14.2	15.3
New Hampshire......	14,286	402	* 20,310	1,704	0.19	* 0.28	7.7	*10.3
Vermont...........	13,062	383	* 20,020	1,549	0.17	* 0.25	11.4	*17.5
Massachusetts......	116,900	1,151	123,540	12,250	1.52	1.73	8.4	9.3
Rhode Island.......	20,482	525	21,520	2,166	0.32	0.30	11.0	10.5
Connecticut........	55,083	790	59,190	5,575	0.72	0.83	7.2	8.4
Middle Atlantic.......	986,907	3,378	1,046,840	50,593	12.82	*14.65	11.0	12.7
New York...........	526,402	2,410	524,020	42,735	6.84	7.35	12.2	13.1
New Jersey.........	155,690	1,323	193,800	15,207	2.02	* 2.72	8.7	*11.6
Pennsylvania.......	304,815	1,852	329,020	25,514	3.96	4.61	10.6	12.6
NORTH CENTRAL.....	1,539,350	4,218	1,576,550	46,224	20.00	*22.12	10.4	11.6
East North Central....	1,023,717	3,440	*1,160,900	42,257	13.29	*16.29	9.7	*12.0
Ohio...............	273,542	1,757	293,650	23,233	3.55	4.12	9.8	11.6
Indiana............	123,484	1,182	120,440	11,218	1.60	1.69	9.0	9.6
Illinois...........	302,311	1,845	* 389,150	27,314	3.93	* 5.46	10.7	*15.1
Michigan...........	220,495	1,581	251,710	19,549	2.86	* 3.53	9.1	*11.3
Wisconsin..........	103,995	1,051	105,950	10,494	1.35	1.49	8.7	9.4
West North Central....	515,533	2,441	* 415,980	19,732	6.71	* 5.83	12.1	*10.7
Minnesota..........	95,936	1,056	87,340	9,152	1.25	1.22	9.5	9.1
Iowa...............	72,000	901	* 53,270	5,735	0.94	* 0.75	9.8	* 7.9
Missouri...........	172,955	1,382	157,040	15,370	2.25	2.20	14.8	14.7
North Dakota.......	27,354	550	* 17,820	2,259	0.35	* 0.25	15.7	*11.5
South Dakota.......	33,815	609	* 21,660	2,559	0.44	* 0.30	18.3	*13.1
Nebraska...........	45,952	717	36,100	4,034	0.60	0.51	12.0	10.1
Kansas.............	64,621	852	* 42,750	5,184	0.84	* 0.60	11.5	* 8.6
SOUTH.........	3,815,961	6,642	*3,098,210	75,523	49.55	*43.43	23.5	*19.6
South Atlantic........	1,605,208	4,308	*1,397,080	52,726	20.85	*19.58	20.7	*18.2
Delaware...........	17,372	441	14,300	1,507	0.23	0.20	12.0	10.4
Maryland...........	116,951	1,145	104,150	10,354	1.52	1.46	11.5	10.7
District of Columbia..........	37,193	639	* 22,740	2,733	0.48	* 0.32	23.2	*15.7
Virginia...........	214,357	1,530	* 155,750	17,012	2.78	* 2.18	18.2	*13.7
West Virginia......	106,359	1,073	* 76,020	7,455	1.38	* 1.07	24.3	*18.9
North Carolina.....	312,545	1,849	* 221,210	24,445	4.05	* 3.10	24.0	*17.5
South Carolina.....	206,995	1,476	165,700	14,510	2.69	2.32	29.1	*23.9
Georgia............	293,871	1,771	254,660	25,543	3.82	3.57	24.4	21.3
Florida............	299,575	1,812	382,550	33,000	3.89	* 5.36	18.9	21.6
East South Central....	987,444	3,379	* 696,460	32,329	12.82	* 9.76	29.3	*21.7
Kentucky...........	208,462	1,495	170,230	16,497	2.71	2.39	25.1	21.4
Tennessee..........	245,157	1,629	195,680	19,346	3.18	2.74	24.8	*20.5
Alabama............	272,146	1,710	* 136,210	15,573	3.53	* 1.91	29.5	*15.9
Mississippi........	261,679	1,638	* 194,340	13,340	3.40	* 2.72	41.5	*32.6
West South Central...	1,223,309	3,761	*1,004,670	42,777	15.88	*14.09	23.9	*20.3
Arkansas...........	155,135	1,284	* 106,060	10,259	2.01	* 1.49	31.6	*21.4
Louisiana..........	308,850	1,812	* 219,900	15,593	4.01	* 3.08	30.1	*22.9
Oklahoma...........	122,548	1,158	* 86,990	10,213	1.59	* 1.22	19.5	*14.6
Texas..............	636,776	2,637	591,720	37,255	8.27	8.30	21.5	20.5
WEST........	1,098,029	3,761	1,126,320	94,039	14.25	*15.80	12.4	12.9
Mountain.............	336,281	1,972	328,530	13,314	4.37	4.61	14.7	13.8
Montana............	24,998	528	22,760	2,079	0.32	0.32	12.9	12.5
Idaho..............	23,716	514	22,530	1,590	0.31	0.32	12.0	11.0
Wyoming............	10,054	336	7,740	765	0.13	0.11	11.2	* 6.6
Colorado...........	71,254	893	64,090	7,532	0.93	0.90	12.3	10.7
New Mexico.........	80,559	924	77,940	5,530	1.05	1.09	26.3	26.0
Arizona............	84,014	960	92,430	8,735	1.09	1.30	17.5	15.8
Utah...............	30,796	538	25,270	2,724	0.40	0.35	10.0	* 8.0
Nevada.............	10,890	351	* 15,770	1,339	0.14	* 0.22	8.5	*11.0
Pacific..............	751,748	2,957	797,790	52,414	9.89	11.19	11.6	12.6
Washington.........	80,172	949	81,290	8,245	1.04	1.14	9.3	10.0
Oregon.............	53,953	779	42,760	4,553	0.70	0.60	10.3	* 8.4
California.........	595,765	2,556	648,050	52,570	7.74	9.09	12.1	13.9
Alaska.............	12,393	370	* 6,150	952	0.16	* 0.09	14.6	* 6.4
Hawaii.............	19,465	468	19,540	2,131	0.25	0.27	9.7	9.6

*An asterisk (*) preceding the SIE data indicates statistically significant change at the 95 percent confidence level from the 1970 census data.

TABLE 25

1975 CUTOFF LEVELS FOR TABLES SHOWING ALTERNATIVE MEASURES OF POVERTY[36]

Universe	Current poverty level			Alternate poverty level		
	Below current poverty level (1)	Below 125% of current poverty level (2)	Below 50% of 4-person median family income 1/ (3)	Below alternate poverty level 2/ (4)	Below 125% of alternate poverty level (5)	Below 50% of 4-person median family income 3/ (6)
	Full poverty matrix (See Table 2)	125% of Column (1)	See footnote 1	1 person:	125% of Column (4)	1 person:
				Under 65.... $ 3,848		Under 65 .....$4,613
				65 and over... 3,610		65 and over... 4,328
				2 persons:		2 persons:
				Head under 65.. 4,810		Head under 65.. 5,766
				Head 65 & over. 4,512		Head 65 & over.. 5,409
				3 persons....... 5,260		3 persons 6,306
				4 persons 6,610		4 persons 7,924 3/
				5 persons 7,923		5 persons 9,498
				6 persons 9,549		6 persons 11,447
				7 persons 10,618		7 persons 12,729
				8 persons 11,512		8 persons 13,800
				9 persons 12,566		9 persons 15,064
				10 persons 13,690		10 persons 16,411
				11 or more 15,194		11 or more 18,214

1/ Poverty line for four-person family taken as half the median for a four-person husband-wife family with two children, estimated at $15,373 for 1975. Other sizes computed using implicit equivalence scale based on full current poverty matrix.

2/ Developed by Mollie Orshansky of SSA.

3/ Poverty line for four-person family taken as half the median for a four-person family equal to $15,848 for 1975. Criteria for other family sizes computed using implicit equivalence scale based on alternate poverty thresholds.

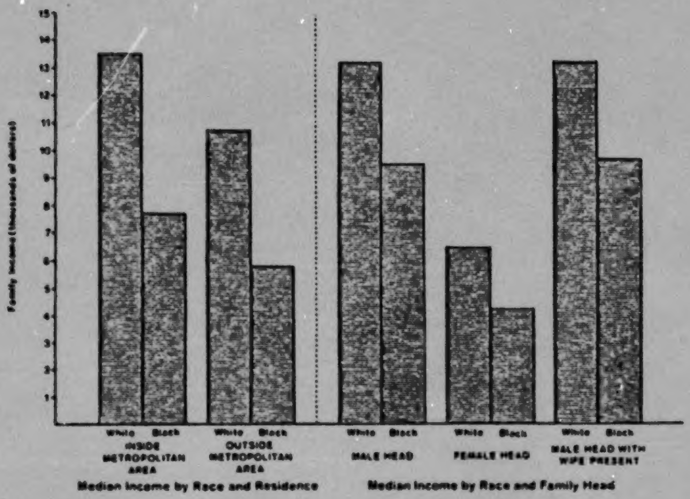
TABLE 26

—POVERTY CUTOFFS IN 1975 BY SEX OF HEAD, SIZE OF FAMILY, AND NUMBER OF RELATED CHILDREN UNDER 18 YEARS OLD, BY FARM-NONFARM RESIDENCE [37]

Size of Family Unit	Number of Related Children Under 18 Years Old						
	None	1	2	3	4	5	6
NONFARM							
Male Head							
1 Person (Unrelated Individual):							
Under 65 years	$2,902						
65 Years and Over	2,608						
2 Persons:							
Head Under 65 Years	3,629	$4,065					
Head 65 Years and Over	3,258	4,065					
3 Persons	4,224	4,361	$4,610				
4 Persons	5,569	5,651	5,456	$5,732			
5 Persons	6,721	6,802	6,584	6,418	$6,556		
6 Persons	7,709	7,734	7,571	7,406	7,187	$7,297	
7 or More Persons	9,708	9,792	9,599	9,435	9,217	8,986	$8,805
Female Head							
1 Person (Unrelated Individual):							
Under 65 Years	$2,635						
65 Years and Over	2,574						
2 Persons:							
Head under 65 Years	3,352	$3,660					
Head 65 Years and Over	3,217	3,660					
3 Persons	4,088	3,894	$4,307				
4 Persons	5,347	5,540	5,514	$5,456			
5 Persons	6,419	6,622	6,591	6,529	$6,309		
6 Persons	7,488	7,625	7,571	7,515	7,269	$7,048	
7 or More Persons	9,407	9,543	9,517	9,435	9,189	8,997	$8,553
FARM							
Male Head							
1 Person (Unrelated Individual):							
Under 65 Years	$2,466						
65 Years and Over	2,216						
2 Persons:							
Head Under 65 Years	3,084	$3,454					
Head 65 Years and Over	2,769	3,454					
3 Persons	3,591	3,707	$3,918				
4 Persons	4,734	4,805	4,637	$4,872			
5 Persons	5,713	5,782	5,555	5,455	$5,572		
4 Persons	6,552	6,574	6,436	6,295	6,109	$6,202	
7 or More Persons	8,254	8,324	8,161	8,020	7,835	7,534	$7,485
Female Head							
1 Person (Unrelated Individual):							
Under 65 Years	$2,232						
65 Years and Over	2,187						
2 Persons:							
Head Under 65 Years	2,850	$3,111					
Head 65 Years and Over	2,735	3,111					
3 Persons	3,473	3,310	$3,661				
4 Persons	4,547	4,708	4,687	$4,637			
5 Persons	5,455	5,620	5,595	5,549	$5,363		
6 Persons	6,366	6,482	6,436	6,389	6,179	$5,991	
7 or More Persons	7,995	8,115	8,090	8,020	7,811	7,647	$7,274

SOURCE: U.S. Bureau of the Census, Current Population Survey.

FIGURE 27



Median Family Income: 1973 [38]

Characteristics	Median Family Income in 1975
Inside Metropolitan Areas:	
White....................................	$15,548
Black....................................	9,494
Outside Mtropolitan Areas:	
White....................................	12,020
Black....................................	6,684
Male Head:	
White....................................	15,094
Black....................................	11,389
Married, Wife Present: White...............	15,125
Black...............	11,526
Female Head:	
White....................................	7,651
Black....................................	4,898

TABLE 27

STATE SHARES OF TOTAL U.S. POOR CHILDREN AGED 5-17 YEARS: 1975[39]

STATE	Current Poverty Level			Alternate Poverty Level		
	Below Current Poverty Level	Below 125% of Current Poverty Level	Below 50% of 4-Person Median Family Income	Below Alternate Poverty Level	Below 125% of Alternate Poverty Level	Below 50% of 4-Person Median Family Income
Alabama	1.91	2.23	2.29	2.24	2.32	2.29
Alaska	0.09	0.10	0.10	0.11	0.11	0.11
Arizona	1.30	1.26	1.20	1.25	1.25	1.25
Arkansas	1.49	1.54	1.53	1.54	1.50	1.51
California	9.09	9.13	9.14	9.04	8.91	8.90
Colorado	0.90	0.78	0.80	0.77	0.83	0.82
Connecticut	0.83	0.87	0.94	0.86	0.98	0.94
Delaware	0.20	0.21	0.21	0.20	0.22	0.21
District of Col.	0.32	0.32	0.35	0.34	0.37	0.36
Florida	5.36	4.87	4.70	4.58	4.66	4.61
Georgia	3.57	3.34	3.47	3.41	3.36	3.42
Hawaii	0.27	0.28	0.29	0.30	0.29	0.30
Idaho	0.32	0.33	0.36	0.34	0.38	0.38
Illinois	5.46	4.85	4.68	5.00	4.56	4.72
Indiana	1.69	1.69	1.82	1.77	1.87	1.83
Iowa	0.75	0.82	0.82	0.84	0.96	0.98
Kansas	0.60	0.64	0.70	0.64	0.76	0.72
Kentucky	2.39	2.44	2.48	2.47	2.39	2.44
Louisiana	3.08	3.11	2.95	3.11	2.77	2.77
Maine	0.54	0.61	0.61	0.58	0.61	0.59
Maryland	1.46	1.42	1.51	1.41	1.57	1.50
Massachusetts	1.73	2.02	2.11	1.94	2.11	2.07
Michigan	3.53	3.60	3.76	3.70	3.79	3.80
Minnesota	1.22	1.41	1.44	1.44	1.58	1.59
Mississippi	2.73	2.43	2.37	2.49	2.21	2.28
Missouri	2.20	1.97	1.87	1.98	1.91	1.89
Montana	0.32	0.32	0.31	0.36	0.34	0.34
Nebraska	0.51	0.56	0.59	0.57	0.65	0.62
Nevada	0.22	0.23	0.23	0.23	0.23	0.23
New Hampshire	0.28	0.28	0.30	0.28	0.30	0.29
New Jersey	2.72	2.59	2.63	2.60	2.71	2.65
New Mexico	1.09	0.98	0.93	0.97	0.93	0.93
New York	7.35	8.10	7.97	8.12	7.60	7.69
North Carolina	3.10	3.17	3.12	3.07	3.04	3.05
North Dakota	0.25	0.24	0.24	0.26	0.26	0.26
Ohio	4.12	4.07	4.01	3.94	4.08	4.04
Oklahoma	1.22	1.33	1.32	1.37	1.29	1.28
Oregon	0.60	0.64	0.67	0.64	0.73	0.71
Pennsylvania	4.61	5.08	5.17	5.10	5.25	5.19
Rhode Island	0.30	0.28	0.30	0.27	0.32	0.31
South Carolina	2.32	2.17	2.02	2.17	2.04	2.06
South Dakota	0.30	0.30	0.33	0.34	0.36	0.35
Tennessee	2.74	2.87	2.72	2.75	2.55	2.65
Texas	8.30	7.93	7.90	8.12	8.12	8.15
Utah	0.35	0.39	0.43	0.41	0.49	0.48
Vermont	0.28	0.28	0.29	0.29	0.29	0.28
Virginia	2.18	2.16	2.13	2.05	2.17	2.17
Washington	1.14	1.06	1.10	1.06	1.12	1.10
West Virginia	1.07	1.12	1.05	1.08	1.04	1.04
Wisconsin	1.49	1.48	1.60	1.48	1.70	1.71
Wyoming	0.11	0.11	0.12	0.12	0.13	0.13

SOURCE: Survey of Income and Education

birth rates and expected likelihood of marriage, some find that the evidence is strongly in favor of a higher percentage of women than ever before being married and a higher percentage of them than ever before expecting to have children.

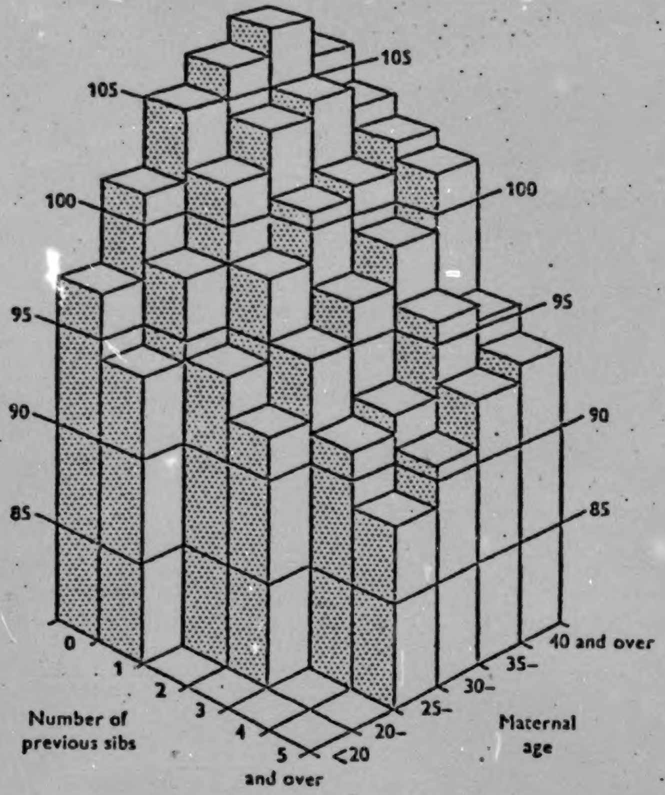
On the other hand, as marriage is deferred, it will reach a point at which the anticipation or desire to become married is decreasingly likely to be fulfilled.

The results of deferred marriage and deferred childbearing could be significant since they reflect a number of complex socially interacting factors, probably associated with greater education, higher discretionary incomes, smaller ultimate family size and hence the willingness to expend absolutely and relatively greater resources on the individual child.

A substantial body of data suggests that deferred childbearing is associated with higher school performance by the child as measured by an I.Q. related test. The research of R.G. Record on children of Aberdeen, Scotland is shown in Figure 28. Intellectual performance increased with the age of the mother and independently declined with the birth order of the child, later children being less able on the average.

While there is great deal of controversy about social, economic, cultural and political factors influencing performance on mental ability tests, the controversy should not obscure the fact that probing those relationships as dependent upon demographic changes may have significant value for educational planners.

FIGURE 28



Mean V.R. scores according to age of mother at birth of child and number of previous sibs.[40]

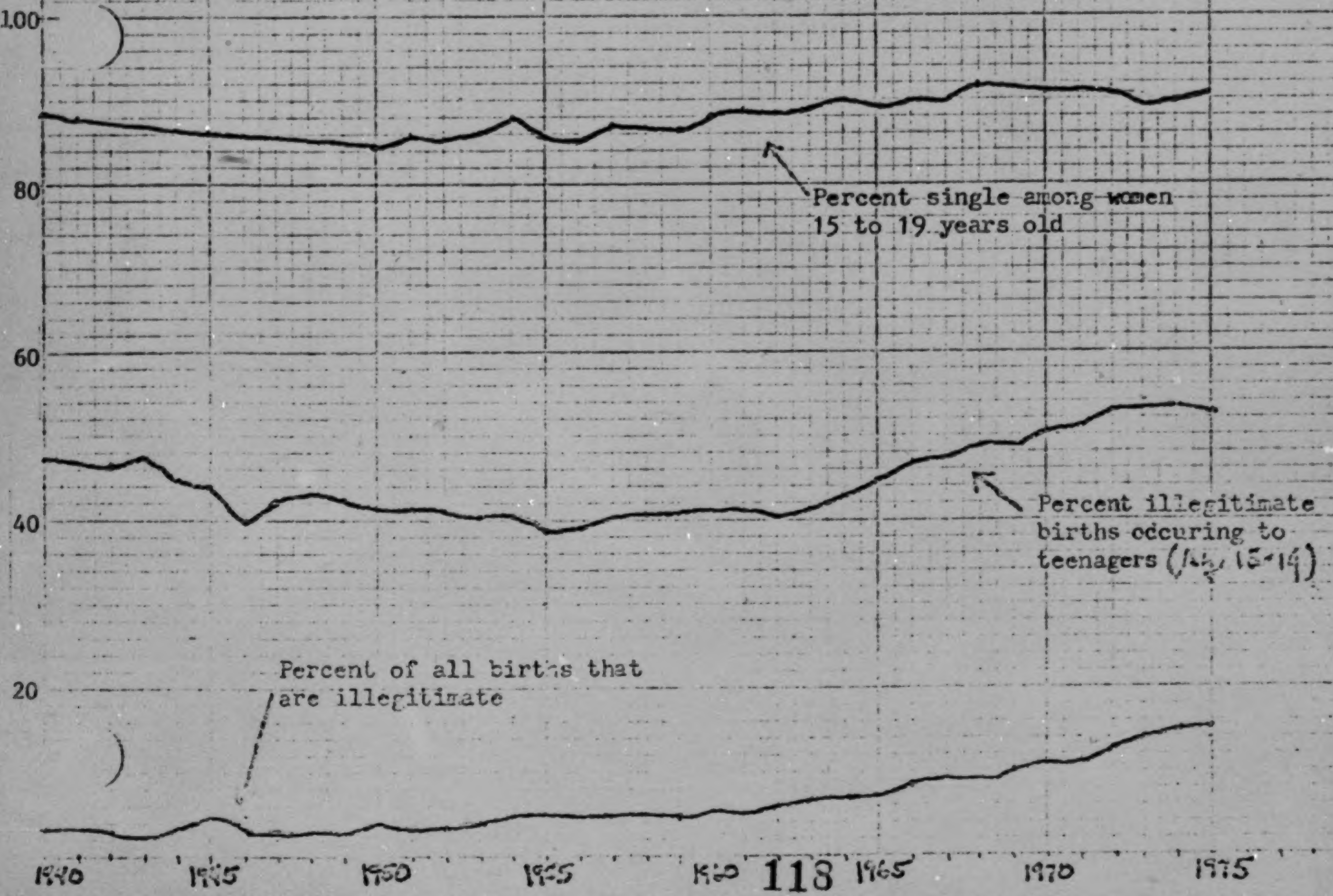
I. Illegitimacy in the United States: 1940 to 1975

The most fundamental fact regarding illegitimacy in the 35 years from 1940 to 1975 is that the number of births occurring outside of wedlock has more than quadrupled, from 90,000 in 1940 to 448,000 in 1975. At the same time the percentage of all births that are classified as illegitimate has risen from 3.8 percent to 14.3 percent (Figure 29). The number of single women 15 to 44 years increased only 38 percent between 1940 and 1975. Clearly, there has been a rise in illegitimacy out of proportion to the rise in number of single women in the population.

The age-specific rates of illegitimacy charted in Figure 30 show the underlying basis for the explosion in numbers of illegitimate births. For all 5-year age groups from 15 to 44 years of age, the rates of illegitimacy rose from the 1940's until the mid-1960's, and for the age-groups between 20 and 34 the rise was especially sharp. Except for teen-agers, however, the rates began to decline by 1965 or 1966, although they all remain at levels substantially higher than those observed in the early 1940's. Illegitimacy rates actually increased for women 15 to 19 years old by 60 percent from 1962 to 1972. By 1970, teen-age women accounted for over half of all illegitimate children, thanks to decreasing rates at older ages and increasing rates among the 15 to 19 year olds. There seems to be some correlation between this statistic and the percent single among women 15 to 19 years old (also charted in Figure 29), although the relationship does not appear to be especially strong.

Figure 29

CHANGES IN THE NUMBER OF ILLEGITIMATE BIRTHS IN THE UNITED STATES:
1940 to 1975 [41]



If one were simply to speculate on the data charted in Figures 29 and 30, it certainly looks as though there was a considerable increase in sexual activity among single women in the 35 years since 1940. The drop in rates among women 20 to 44 years old probably marks the use of more effective contraceptives and their greater practical availability to single women. The fact that rates among teen-agers are not dropping may well reflect poorer understanding of the use of contraceptives as well as lesser availability than among older women.

As the number of women 15 to 19 years old decrease, the number of illegitimate births may cease to rise so rapidly as it has in the immediate past.

The illegitimacy rate is substantially higher for Blacks than whites (Figure 31 and Table 28). Since Blacks are concentrated in cities that has significant implication for big urban school systems. The increased proportion of illegitimate births is not just a big city or a minority group problem. Data form the Florida Department of Health and Rehabilitative Services show that within the state there has been a steady increase since 1960 in the percent of live births to unwed mothers; in 1950, 8 percent; in 1975, 19.4 percent of live births were to unwed mothers.

The increase is characteristic of both Blacks and whites: in 1950, 1.8 percent of white births were legitimate; in 1975, 7.5 percent. In 1950, 23.2 percent of nonwhites were illegitimate; in 1975, 53 percent were (Table 29).

FIGURE 30. Rates of Illegitimate Births Per 1,000 Unmarried Women[42]

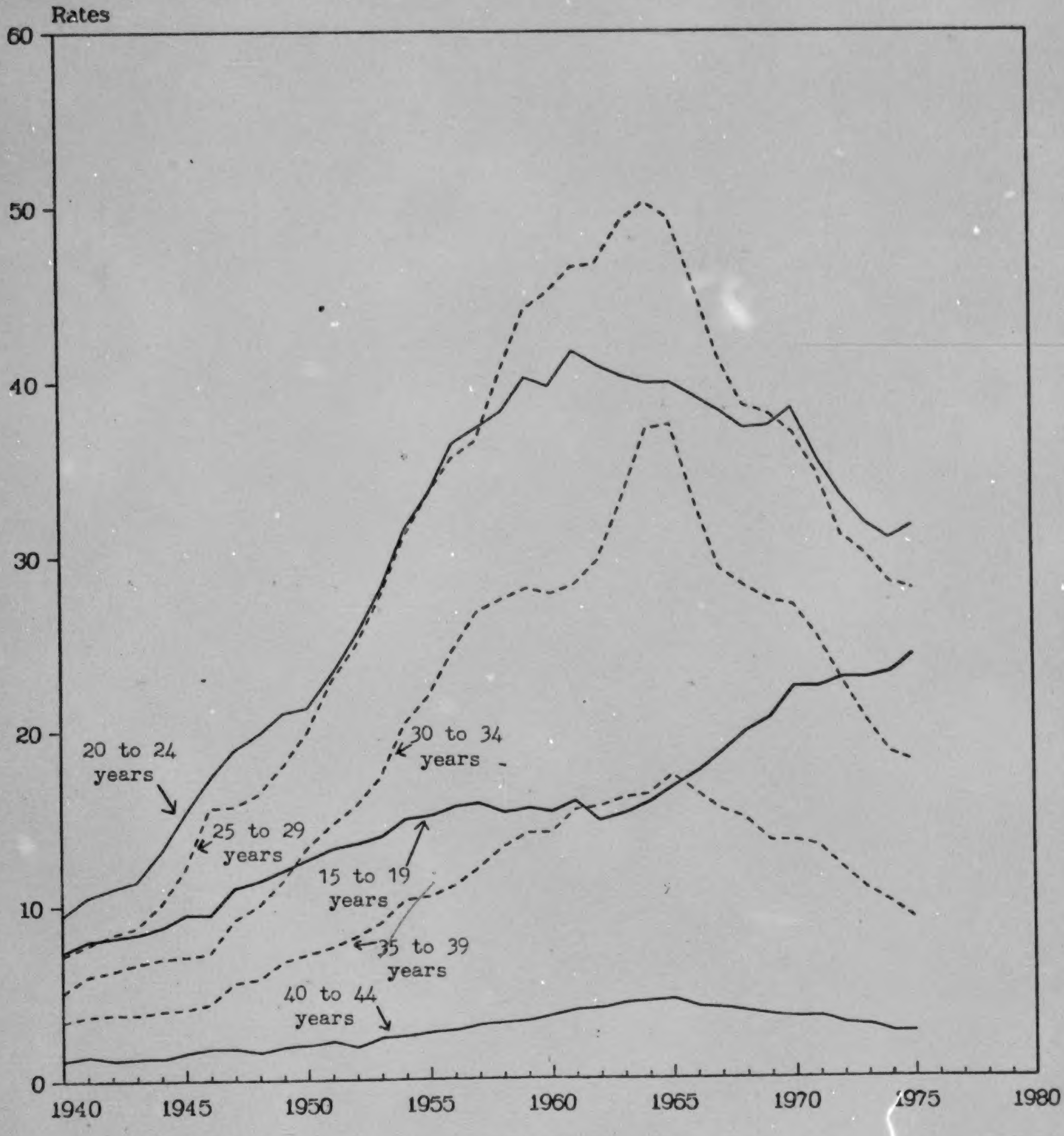
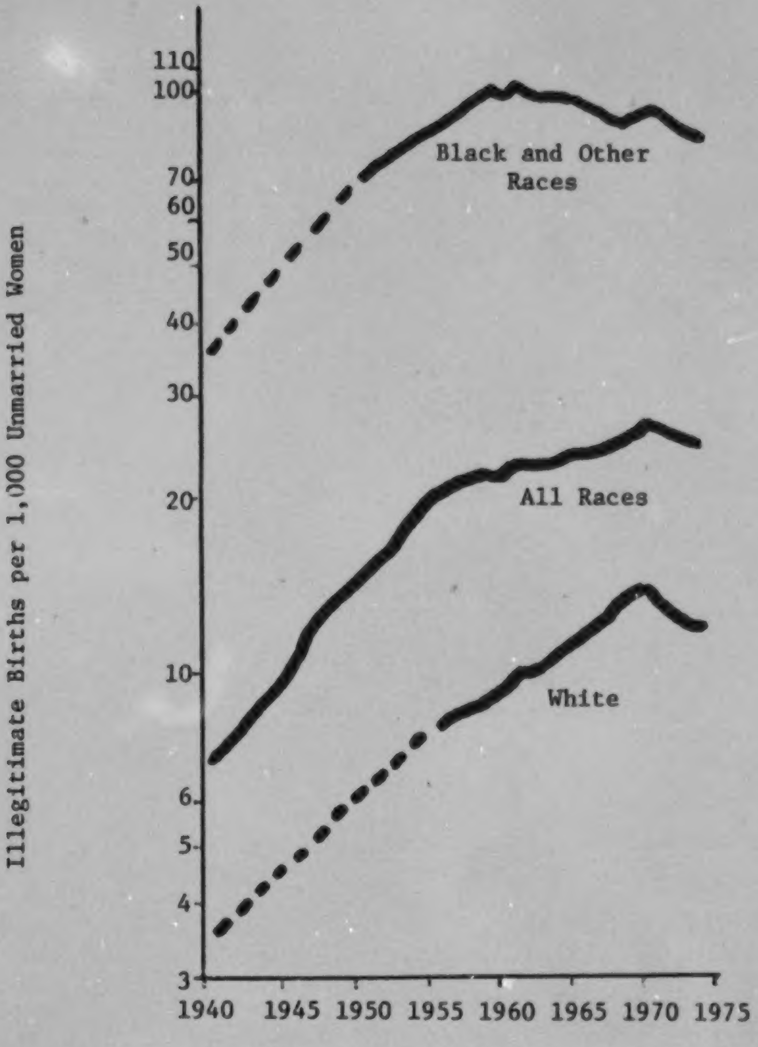


FIGURE 31

Illegitimate Birth Rates per 1,000 Unmarried Women 15 to 44 Years Old by Race: 1940 to 1974[43]



Data for Whites and Nonwhites are for 1940, 1950, and 1955 to 1974. The broken line indicates a discontinuous series.

Table 28. Estimated Number of Illegitimate Births per 1,000 Unmarried Women, By Race and Age: Single Year Data for Selected Years, 1940 to 1974, and Five Year Averages 1940-1944 to 1970-1974

Period	Age of Mother						
	15 to 44 years	15 to 19 years	20 to 24 years	25 to 29 years	30 to 34 years	35 to 39 years	40 to 44[1] years
ALL RACES							
1970 to 1974	25.1	22.8	34.0	32.2	22.9	11.9	3.1
1974	24.1	23.2	30.9	28.4	18.6	10.0	2.6
1973	24.5	22.9	31.8	30.0	20.5	10.8	3.0
1972	24.9	22.9	33.4	31.1	22.8	12.0	3.1
1971	25.6	22.4	35.6	34.7	25.3	13.3	3.5
1970	26.4	22.4	38.4	37.0	27.1	13.6	3.5
1965 to 1969	24.0	18.6	38.4	42.6	31.6	15.5	4.0
1969	25.0	20.6	37.4	38.1	27.4	13.6	3.6
1968	24.4	19.8	37.3	38.6	28.2	14.9	3.8
1967	23.9	18.6	38.3	41.4	29.2	15.4	4.0
1966	23.4	17.5	39.1	45.6	33.0	16.4	4.1
1965	23.5	16.7	39.9	49.3	37.5	17.4	4.5
1960 to 1964	22.3	15.4	40.5	47.5	31.2	15.5	4.0
1955 to 1959	20.8	15.5	37.1	38.1	25.8	12.2	3.0
1950 to 1954	16.1	13.6	25.9	25.2	16.3	8.5	2.2
1945 to 1949	11.8	10.7	18.5	15.6	9.0	5.3	1.7
1940 to 1944	8.0	8.2	11.1	8.5	6.2	3.7	1.3
WHITE							
1974	11.8	11.1	15.2	14.9	9.6	5.5	1.5
1973	11.9	10.7	15.6	16.1	10.7	5.9	1.7
1972	12.0	10.5	16.7	16.6	12.1	6.4	1.6
1971	12.5	10.3	18.8	18.6	13.3	7.2	1.9
1970	13.9	10.9	22.5	21.1	14.2	7.6	2.0
1965	11.6	7.9	22.1	24.3	16.6	4.9[2]	
1960	9.2	6.6	18.2	18.2	10.8	3.9[2]	
1955	7.9	6.0	15.0	13.3	8.6	2.6[2]	
1950	6.1	5.1	10.0	8.7	5.9	2.0[2]	
1940	3.6	3.3	5.7	4.0	2.5	1.2[2]	
BLACK[3]							
1974	86.6	95.1	111.2	82.5	52.3	24.2	6.7
1973	89.5	96.0	117.2	86.0	58.1	27.4	7.7
1972	92.2	98.8	122.0	89.7	57.7	30.2	8.5
1971	96.5	99.1	131.0	100.4	69.0	32.7	9.4
1970	95.5	96.9	131.5	100.9	71.8	32.9	10.4
1965	97.6	75.8	152.6	164.7	137.8	39.0[2]	
1960	98.3	76.5	166.5	171.8	104.0	35.6[2]	
1955	87.2	77.6	133.0	125.2	100.9	25.3[2]	
1950	71.2	68.5	105.4	94.2	63.5	20.0[2]	
1940	35.6	42.5	46.1	32.5	23.4	9.3[2]	

---

[1] Rates computed by relating illegitimate births to mothers aged 40 years and over to unmarried women aged 40 to 44 years.

[2] Rates computed by relating illegitimate births to mothers aged 35 years and over to unmarried women aged 35 to 44 years.

[3] Prior to 1970 data are for Black and all other races except White.

TABLE 29

Percent of Resident Live Births to Unwed Mothers by Race; Florida, 1950, 1960, and 1965-1975.[45]

Year	1950		1960		1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
White	1.8		2.7		4.6	5.4	6.1	6.4	6.5	6.5	6.0	6.3	6.4	6.7	7.5
Non-White	23.2		27.9		30.8	32.0	34.4	36.7	38.7	41.1	44.0	47.7	50.1	51.6	53.0
Total	8.0		9.6		11.9	13.0	13.8	14.3	14.5	15.0	15.7	17.0	17.7	18.2	19.4

Source: Public Health Statistics Section, Florida Department of Health and Rehabilitative Services.

Sex Ratios

Sex ratios, that is, the number of males per hundred females either at birth or in a given population, cohort or region, can influence fertility behavior, the choice of work or marriage, the choice of deferring marriage as well as the rates and incidences of divorce, separation, and illegitimacy. The extent to which this may be an independent variable in demographic patterns which may influence any of the variables already discussed is unclear at this point, but it is the subject of a forthcoming monograph by Professor Marcia Guttentag of Harvard.

IV. WOMEN'S ENTRY INTO THE WORK FORCE

The changing role of women in our society is having and will continue to have a major effect upon the future of education.[1]

A higher proportion of women are heads of families. This is a result of the increasing incidence of divorce and of single women who keep their children. More women of each race, in every marital status, in every educational category, and with each number and age of children are now in the labor force.

The long-term trend since World War II is for larger numbers of young women to enter the work force at younger ages and to continue longer at work throughout their childbearing and later years. Women are employed in increasingly diversified jobs in the work force, although they still largely occupy less desirable positions. They are earning substantially less than men and that income gap is widening. Women earn 57 percent as much as men. Among the principal factors driving women into the work force are economics especially, as associated with being single, widowed, divorced or separated. However, among married women with working husbands there is a tendency for labor force participation to increase with the husband's income, but this tendency is more directly related to the educational level of the wife.

The long-term shift in the labor force toward a service and, more significantly, toward a knowledge-based economy is changing the nature of the work force. There should be more job opportunities open to women since such gender differencesas physical skill and strength become increasingly irrelevant to employment in a knowledge-based economy.

A. Implications for the School System

The primary implications for education of the women's entry into the workforce are on curriculum and services to the student, on extended care services for the children of working mothers, and on the reduced amount time for parental volunteer services. Dual income families may also have residential and school options of removing their children from urban public schools.

1. Curriculum

- With regard to curriculum, since women are becoming an increasing factor in the work world, career planning, overcoming the stylized gender role associated with occupational choice, job counseling, and resocialization to new work-sex roles are highly socially and economically significant opportunities.

  Attitudes of children toward these future roles may be substantially influenced by working mothers who will set new role models. Those new role models will directly and indirectly reinforce the demand for work, career and vocationally oriented curriculum material and and counseling.

  The American Association of American Colleges' "Survey of Research Concerns on Women's Issues" noted:[2]

Under recent Federal legislation, more funds now go into vocational and career training at the high school level, and many innovative and promising programs are under way. But most of them are directed at boys only. Girls continue to be shuttled into classes like 'Teen-Age Boutique.' Research is needed to document the extent to which sex segregation in vocational and technical education still exists despite laws that forbid it. The next step is to consider how to assure that the law is enforced and training programs are desegrated.

Even when adolescent girls have high aspirations and expectations they may encounter opposition on both overt and subtle forms. For instance, research has shown that high school boys think that girls should not aim too high in their career plans. Any study of socialization, therefore, should take into account the attitudes of the peer group and the pressures it exerts on the individual. The possibilities of coeducational counseling might be explored.

- Since the age for entering marriage is generally increasing and is accompanied by earlier entry into the work force, curriculum material focusing on independent living, the single state, as well as guidance, counseling, and training in financial management and personal affairs is quite appropriate.
- For those in the lowest occupational strata, particularly those burdened by small children and/or single parenthood, education especially focused on improving one's economic state through continuation of course certification and specially tailored high school programs would have enormous personal, social and economic benefit.
- The reduced time available for parenting, in dual income families and especially in families with a single working head, may create the latent, if not overt, demand for new school services particularly dealing with those functions

historically learned at home. Eating, drinking, dressing and social behavior, deportment, manners, self-control, as well as other compensatory functions resulting from reduced adult care, may comprise this agenda.

2. Day Care

Women entering into the work force often have high demand for day care and nursery care for preschool and young school children. As this becomes a more generally pressing matter, a logical place to look for this service is in the schools. For children roughly between ages 7 and 13, the school day is not quite long enough to accommodate the needs of the dual parent working family nor the needs of single parent working households. There are efforts in some communities to extend the afternoon program through collateral services. These do not necessarily extend the educational school day, but are extending the use of education facilities. As a rough estimate, 15 percent of a random school population in this age group can be usefully served by extending facilities from 3 p.m. to 6 p.m. For mothers with younger children, the need for care and maintenance for longer periods, (effectively extended day care) suggests--in view of the underutilization of schools and surplus teacher supply--the possibility of extending school functions down into those areas. Administratively and from the point of view of surplus teachers,

teachers' unions and community needs, this option seems quite attractive. However, there are data, discussed below, coming out of the social psycho logical literature on the relationship between the intellectual performance of a child and his extended exposure to other children, which suggest adverse effects on mental development. These are, at least, cautionaries.

3. Dual Income Families

Women's entry into the labor force may be creating a new cadre of dual-income families with substantially higher income than comparable single working member families. Dual income especially in middle-class, managerial and professional households implies significantly more discretionary money which may lead to a tendency in such families, white and minority, to move their children to private schools or to relocate their residence outside central cities.

A compensatory balancing factor, however, may be that dual income families, particularly those higher up on the socio-economic ladder, may find it more difficult to find employment for both workers in smaller cities, other big cities, or rural areas. Hence dual-working families may tend to preferencially stay where they are or to locate in larger cities which have a more diverse occupational structure.

4. Volunteerism

As a result of being in the labor force, fewer women will have time for voluntary service in the schools. At the same time that the availability of voluntary services may be declining, there may be an increase in demand for the kinds of services that volunteers can perform well. This decline of volunteers implies a decline in services offered or else greater demands on paid staff.

5. Other Possible Effects

Since participation in the work force is associated with smaller numbers of children, as more women participate in the work force, this may tend to further depress or maintain low fertility.

Since participation in the work force by women is correlated with the level of education, as more women work, they will further stimulate the desire for more education and in turn stimulate that demand for their children.

B. The Data

This section deals with the facts and trends of women in the work force. The next section considers day care specifically.

1. Numbers

- Nearly 36 million women were in the labor force in 1974. This represents 46 percent of all women aged 16 or over and 39 percent of the total work force.

- The number of women in the work force has doubled since 1950 going from 18 million in 1950 to 36 million in 1974 (Figure 32).
- 4.6 million women of minority races (49%) were in the labor force in 1974.
- The Bureau of Labor Statistics projects that by 1985, 41 million women will be working, comprising over 38 percent of the total labor force. This is a continuing but slow rise (Table 30 and Figure 33).

b. Age

1) 53 percent of all women, aged 18-64, worked in 1974 (Table 31 and Figure 34).

2) 63 percent of women in the 20-24 age group work (Table 31).

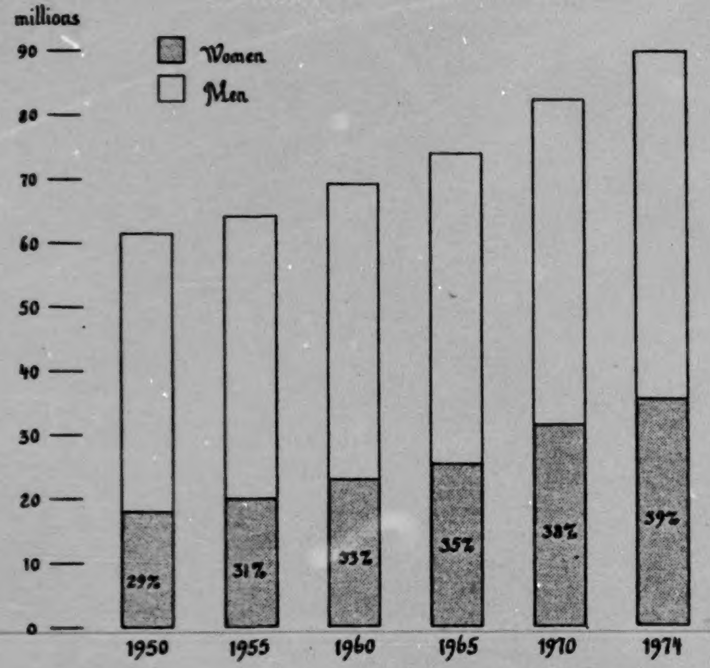
3) More important as a trend is the earlier entry since WW II of a large portion of women and their longer participation in the labor force over their lifetimes (Figure 35 and Table 31).

4. The participation pattern is approximately that of man, especially for women 20-40 years old, although the total percent participation is substantially less (Figure 36).

FIGURE 32

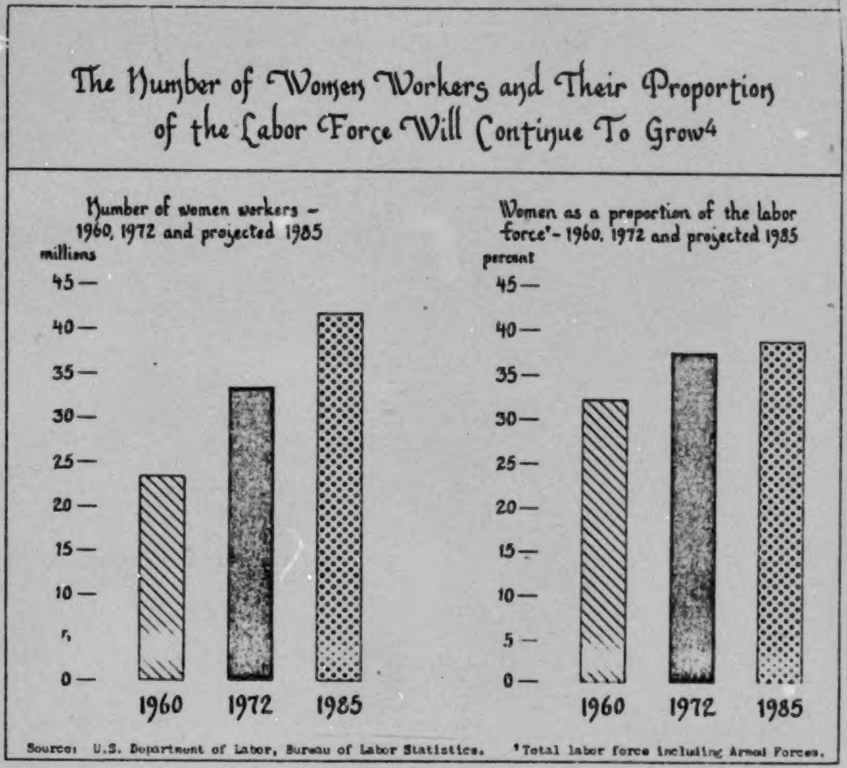
The Number of Women Workers Doubled between 1950 and 1974 — And They Now Account for Nearly Two-fifths of All Workers[3]

Number and proportion of women workers in the civilian labor force, April 1950 - 1974



Source: U.S. Department of Labor, Bureau of Labor Statistics.

FIGURE 33



Source: U.S. Department of Labor, Bureau of Labor Statistics.

¹Total labor force including Armed Forces.

Table 30. -TOTAL LABOR FORCE, BY AGE AND SEX, ANNUAL AVERAGE 1960, 1972, AND PROJECTED TO 1980 AND 1985[5]

Sex and age	Number (in thousands)				Percent distribution			
	1960	1972	1980	1985	1960	1972	1980	1985
BOTH SEXES								
Total, 16 years and over	72,142	88,991	101,809	107,716	100.0	100.0	100.0	100.0
16 to 19 years	5,246	8,367	8,337	7,165	7.3	9.4	8.2	6.7
20 to 34 years	22,749	32,463	42,223	44,758	31.5	36.5	41.5	41.6
35 to 54 years	31,562	33,689	35,165	39,463	43.7	37.9	34.5	36.6
55 years and over	12,585	14,472	16,084	16,330	17.4	16.3	15.8	15.2
Median age in years	39.8	37.2	35.2	35.8	--	--	--	--
MEN								
Total, 16 years and over	48,870	55,671	62,590	66,017	67.7	62.6	61.5	61.3
16 to 19 years	3,184	4,791	4,668	3,962	4.4	5.4	4.6	3.7
20 to 34 years	16,019	20,601	26,375	27,896	22.2	23.1	25.9	25.9
35 to 54 years	20,974	21,116	21,759	24,361	29.1	23.7	21.4	22.6
55 years and over	8,692	9,163	9,788	9,798	12.0	10.3	9.6	9.1
WOMEN								
Total, 16 years and over	23,272	33,320	39,219	41,699	32.3	37.4	38.5	38.7
16 to 19 years	2,062	3,576	3,669	3,203	2.8	4.0	3.6	3.0
20 to 34 years	6,730	11,862	15,848	16,862	9.3	13.3	15.6	15.7
35 to 54 years	10,588	12,573	13,406	15,102	14.7	14.1	13.2	14.0
55 years and over	3,893	5,309	6,296	6,532	5.4	6.0	6.2	6.1

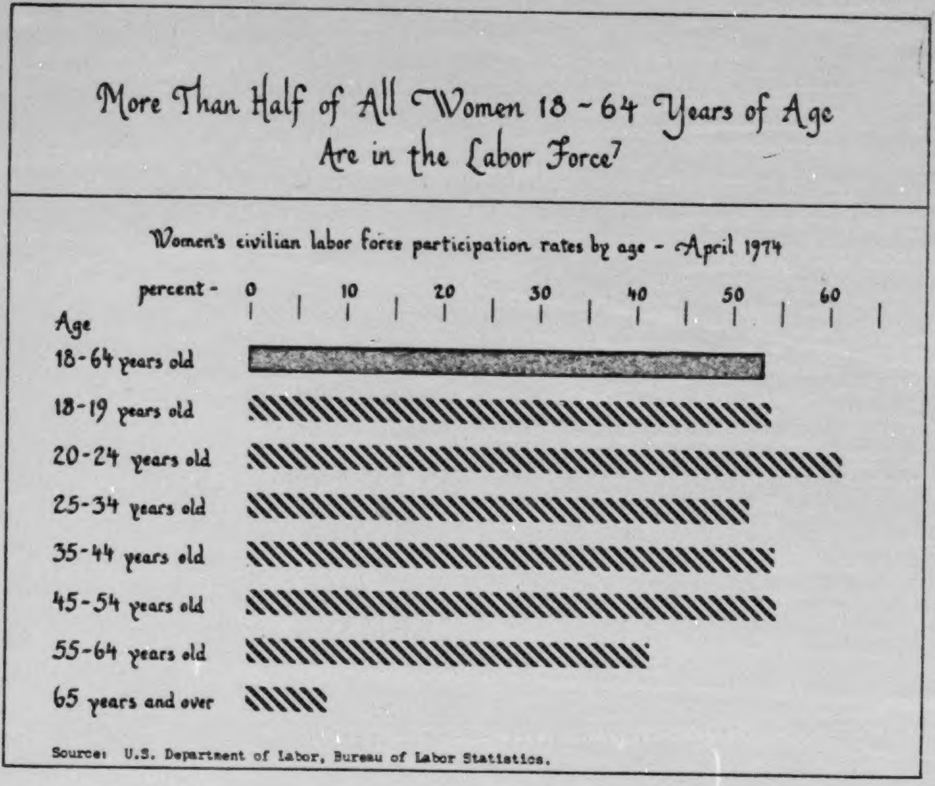
Source: For 1960 and 1972, U.S. Department of Labor, 1973 Manpower Report of the President, Table A-3; for 1980 and 1985, "The U.S. Labor Force: Projections to 1990," Monthly Labor Review, July 1973.

Table 31. LABOR FORCE PARTICIPATION RATES* OF WOMEN, BY AGE GROUPS, SELECTED YEARS, UNITED STATES, 1950 TO 1974[6]

Age Group	*1950*	*1960*	*1970*	*1974*
16 and 17 years	30.1	29.1	34.9	40.4
18 and 19 years	51.3	51.1	53.7	58.3
20 to 24 years	46.1	46.2	57.8	63.2
25 to 34 years	34.0	36.0	45.0	52.4
35 to 44 years	39.1	43.5	51.1	54.7
45 to 54 years	38.0	49.8	54.4	54.6
55 to 64 years	27.0	37.2	43.0	40.7
65 years and over	9.7	10.8	9.7	8.2
Total 16 years and over	33.9	37.8	43.4	45.7

*Percent of noninstitutional population in the labor force

FIGURE 34



Source: U.S. Department of Labor, Bureau of Labor Statistics.

FIGURE 35

Cohort Labor Force Participation: Men Born 1906-1915; Women Born 1886-1975[8]

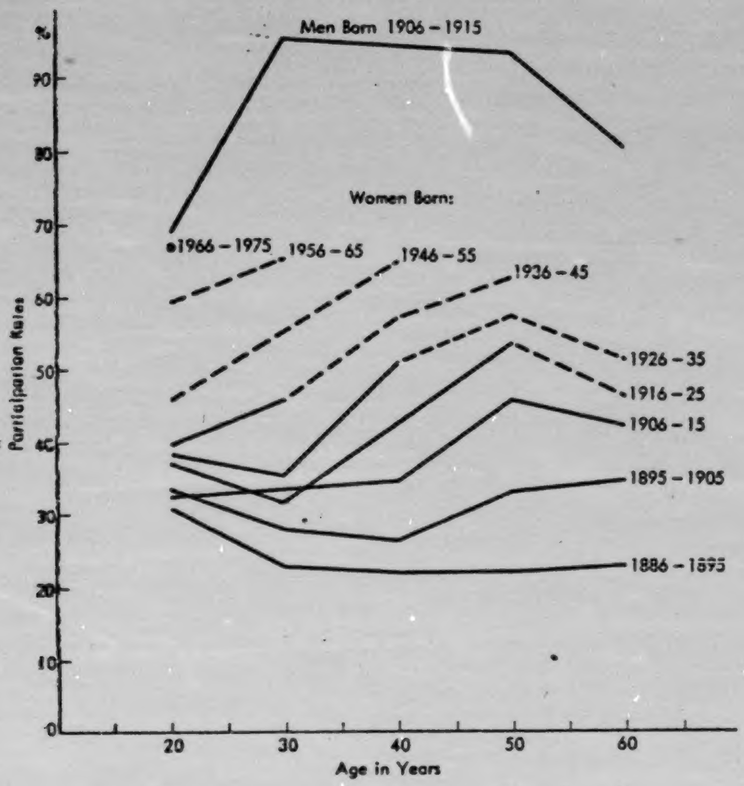
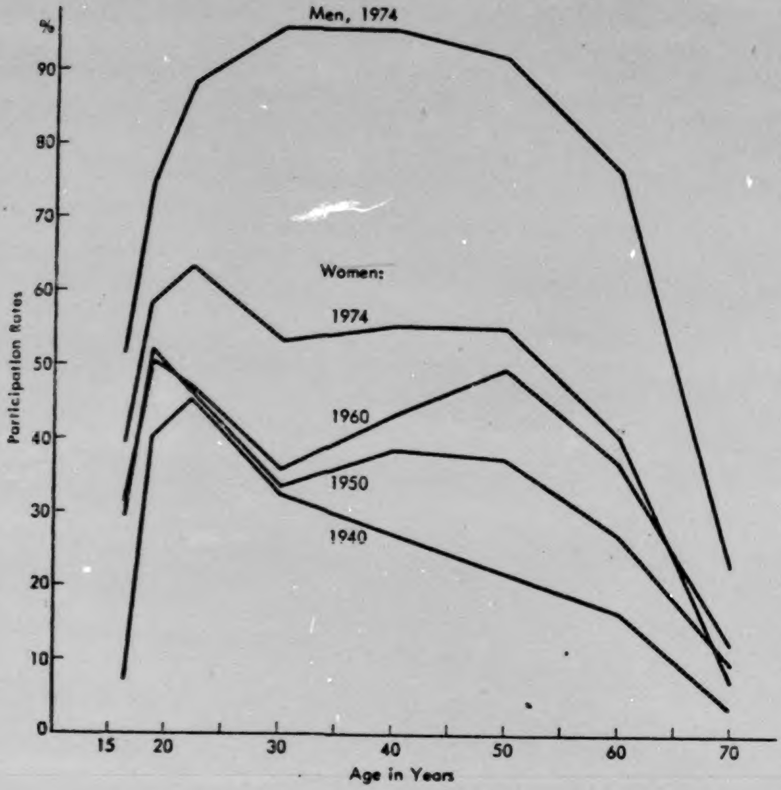


FIGURE 36

Labor Force Participation Rates by Age for Women in 1940, 1950, 1960, and 1974—and for Men in 1974[9]



c. Occupations for Women

1)

Clerical	Service Workers	Professionals	Operative (factory)
35%	21%	15%	13%

The participation of women in various occupational categories is not the same as for men (Table 32). Women in 1974 were dominant (more than 50%) in service and finance with 40% more working in trade and government jobs.

2) Prior to World War II, most women in the labor force were either:

- o single, middle class, white collar workers who worked until they married, or
- o poor, single or married, working in factories or domestic service.

After the War, the rolls of women workers were increased by the addition of married, middle-class women. Between 1960 and 1972, the number of Black female clerical workers increased from 262,000 to 976,000 (from 9 to 24 percent of all Black women workers (Figure 37 .

3) Economic need is a primary reason for women to work (Figure 41).

- o Participation also increased with the husband's work (Figure 38 and Table 33, but more important, are the details of the effects of education and the number of children.
- o Participation also increased with the level of education (Table 33).
- o Participation also increased with the age of the children (Figure 40b and Table 33).

4. Participation of women with children has steadily increased since 1965 (Figure 40a).
5. Work participation also seems to be increasing independently of the above factor, probably for more diverse social reasons (Figure 39).

6. Race Makes a Difference
   - o Participation of Black women with children is higher than for white women with the same number of children (Figure 40b).
   - o Between 1960 and 1972, the number of Black female clerical workers increased from 262,000 to 976,000 (from 9 to 24 percent of all Black women workers).
   - o Other differences between minority women and white women in occupation groups are diminishing (Figure 37).

d. Unemployment

1) In 1973, 2.4 million or 48 percent of all unemployed were women (Figure 42).

2) Unemployment rate for women was 6.7% - 10.7% for Black women,
and 6.1% for white women;
for men it was 4.8%.

The unemployed proportion for women is increasing.

3) Rate of unemployment for female-headed household is 6.4%;
Rate of unemployment for male heads of families is 2.7%.

TABLE 32

—MAJOR OCCUPATION GROUPS OF EMPLOYED WOMEN, 1959, 1964, 1969, AND APRIL 1974[10]

(Women 16 years of age and over)

Major occupation group	Number (in thousands)				Percent distribution			
	April 1974	1969	1964	1959	April 1974	1969	1964	1959
Total	33,265	29,084	23,831	21,164	100.0	100.0	100.0	100.0
Professional, technical workers	5,179	4,018	3,107	2,558	15.6	13.8	13.0	12.1
Managers, administrators	1,654	1,261	1,108	1,078	5.0	4.3	4.6	5.1
Sales workers	2,260	2,017	1,730	1,661	6.8	6.9	7.3	7.8
Clerical workers	11,463	9,975	7,436	6,322	34.5	34.3	31.2	29.9
Craft and kindred workers	476	339	250	213	1.4	1.2	1.0	1.0
Operatives	4,344	4,489	3,643	3,258	13.1	15.4	15.3	15.4
Nonfarm laborers	339	146	88	100	1.0	.5	.4	.5
Service workers	7,091	6,271	5,694	4,965	21.3	21.6	23.9	23.5
Private household	1,290	1,592	1,995	1,915	3.9	5.5	8.4	9.0
Other	5,800	4,679	3,699	3,050	17.4	16.1	15.5	14.4
Farm workers	460	569	778	1,009	1.4	2.0	3.3	4.8

Source: Manpower Report of the President, April 1974.

TABLE 33

—Labor Force Participation Rates[1] of Married Women, by Educational Attainment, Presence and Age of Children, and Income of Husband, March 1974 [11]

Income of husband and presence and age of children	All wives	Years of school completed				
		High school		College		
		Less than 4 years	4 years	1 year or more	1–3 years	4 years or more
All income classes	43.0	32.2	46.0	52.9	48.1	58.8
No children under 18 years	43.0	27.5	49.5	59.7	53.2	67.3
Children 6 to 17 years only	51.2	43.9	53.1	56.8	52.7	62.0
Children under 6 years	34.4	30.5	33.5	39.6	37.0	43.0
Under $3,000	35.5	25.3	44.6	61.1	56.2	68.0
No children under 18 years	32.0	22.5	40.8	58.3	53.9	64.8
Children 6 to 17 years only	54.6	44.3	63.4	(1)	(1)	(1)
Children under 6 years	36.8	25.7	40.6	(1)	(1)	(1)
$3,000 to $4,999	35.8	25.3	46.3	54.1	53.5	55.1
No children under 18 years	31.2	20.0	43.6	50.5	47.8	54.5
Children 6 to 17 years only	53.6	44.6	66.8	(1)	(1)	(1)
Children under 6 years	38.8	29.9	41.0	60.6	65.9	(1)
$5,000 to $6,999	43.3	31.3	50.6	59.3	55.8	66.0
No children under 18 years	40.4	25.7	50.5	60.5	56.5	66.7
Children 6 to 17 years only	54.4	42.3	64.0	69.5	70.4	(1)
Children under 6 years	40.6	34.5	41.7	51.5	48.0	62.1
$7,000 to $9,999	49.3	40.1	51.2	61.8	59.3	65.2
No children under 18 years	51.7	39.0	55.7	66.8	62.7	71.7
Children 6 to 17 years only	56.9	46.8	60.7	74.0	73.7	74.3
Children under 6 years	39.8	33.7	39.2	48.9	48.0	50.2
$10,000 and over	43.4	34.8	43.5	49.2	42.7	56.3
No children under 18 years	48.1	31.7	49.7	59.1	50.3	68.0
Children 6 to 17 years only	48.9	42.6	49.4	53.0	47.7	59.5
Children under 6 years	30.1	27.5	28.3	34.0	29.1	39.4

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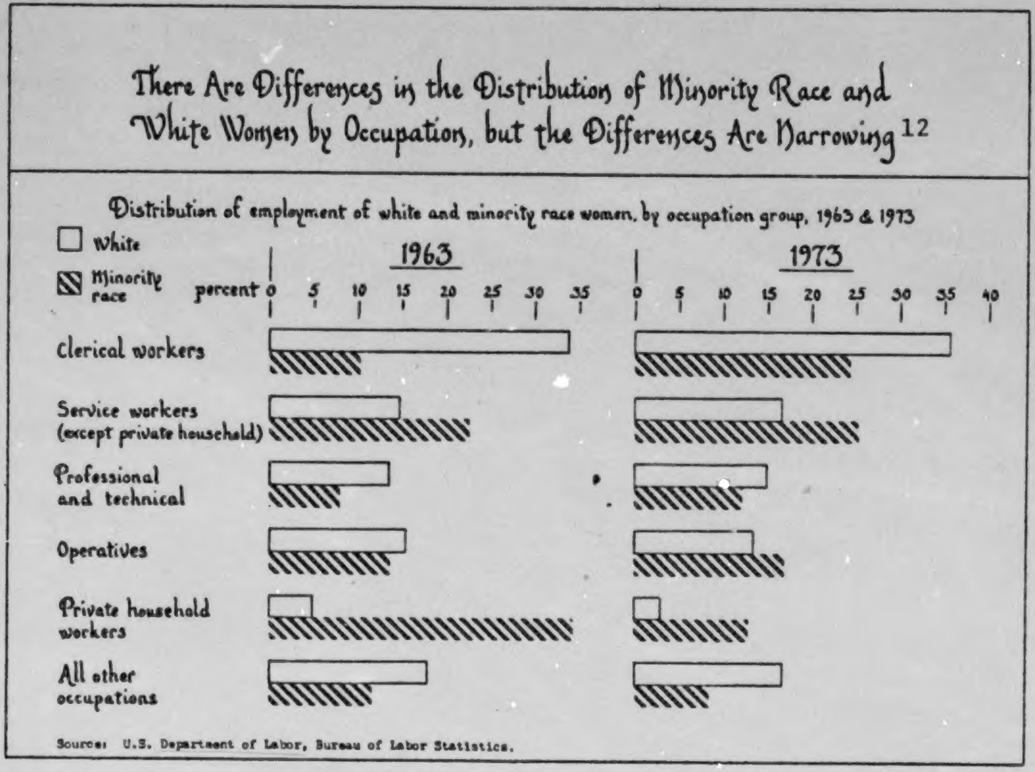
[1] Rate not shown where base is less than 75,000.

Source: U.S. Department of Labor, Bureau of Labor Statistics: Special Labor Force Report No. 173.

FIGURE 37

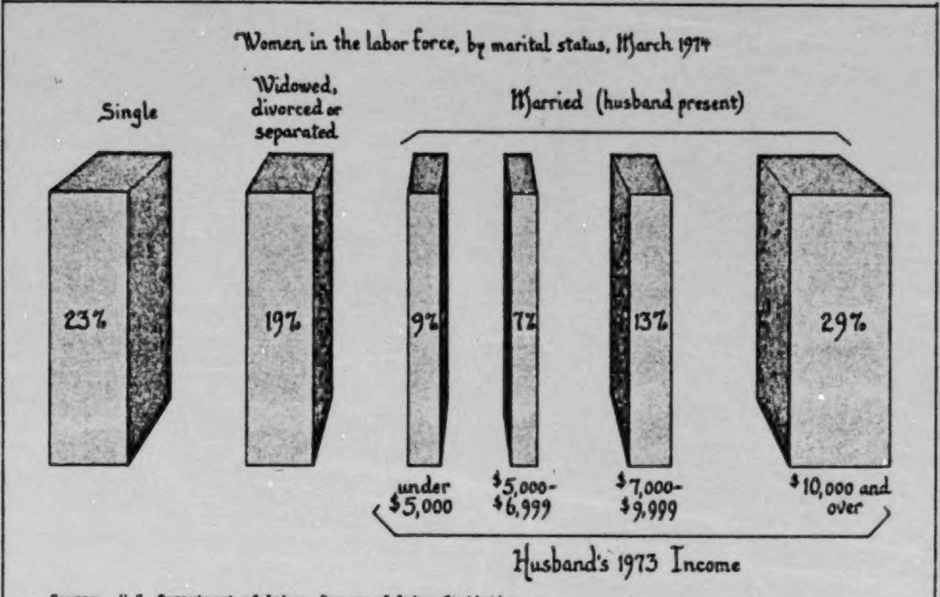


There Are Differences in the Distribution of Minority Race and White Women by Occupation, but the Differences Are Narrowing[12]

Distribution of employment of white and minority race women, by occupation group, 1963 & 1973

Source: U.S. Department of Labor, Bureau of Labor Statistics.

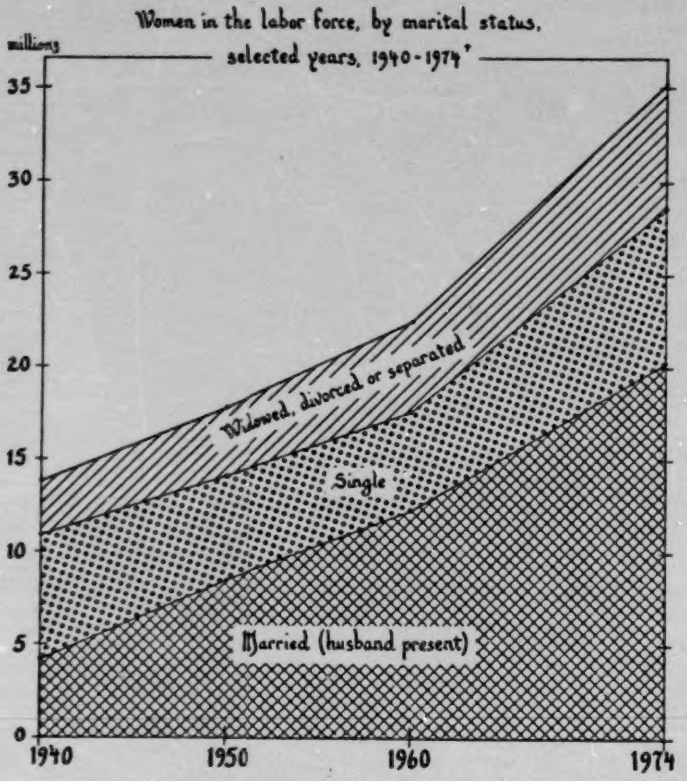
FIGURE 38[13]



Source: U.S. Department of Labor, Bureau of Labor Statistics.

FIGURE 39

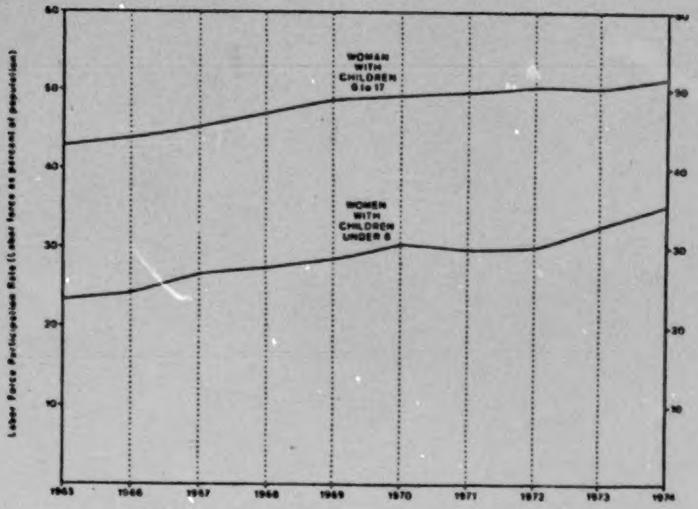
The Number of Married Women in the Labor Force Has Expanded Dramatically[14]



Women in the labor force, by marital status, selected years, 1940-1974*

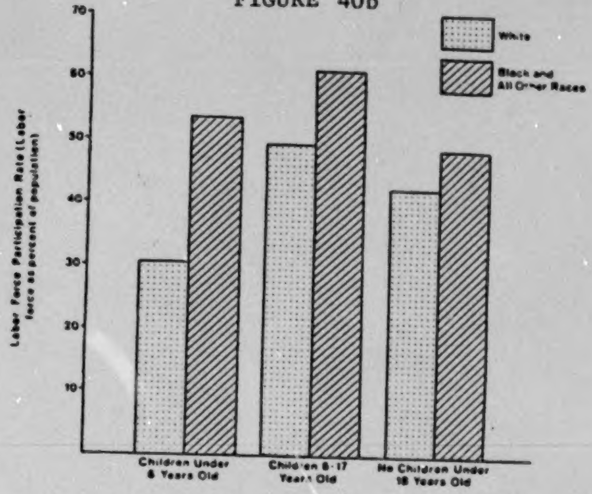
*Data cover March of each year and are for females 14 years of age and over except 1974 which are for 16 and over.
Source: U.S. Department of Labor, Bureau of Labor Statistics.

FIGURE 40a



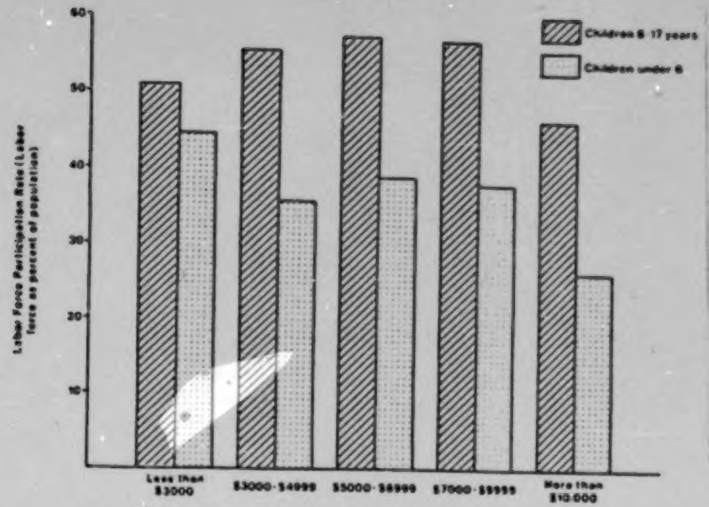
Labor Force Participation of Married Women with Children, Husband Present: 1965 to 1974[15]

FIGURE 40b



Labor Force Participation of Married Women With Children by Race: 1973[16]

FIGURE 41



Labor Force Participation of Married Women With Children by Husband's Income: 1973[17]

4) In March 1973, the number of unemployed married women reached 8.5 percent, the highest recorded since 1940.

5) About half of the unemployed married women reported job loss as the reason for unemployment, a clear departure from the usual pattern where entry or reentry is the major reason. The proportion of unemployed married men citing job loss rose from 77 to 85 percent over the year.

6) As in the past, the unemployment rate was higher for mothers of preschool age children (14 percent) than for either married women without children under age 18 or for married women whose youngest child was school age (both 7 percent).

7) Unlike the preceding 12-month period ending in March 1974 this growth was dominated by single and divorced persons, married women led the increase between March 1974 and March 1975. They accounted for about 45 percent of the net increase in the labor force, compared with 30 percent for single men and 20 percent for divorced persons.

e. Marital Status

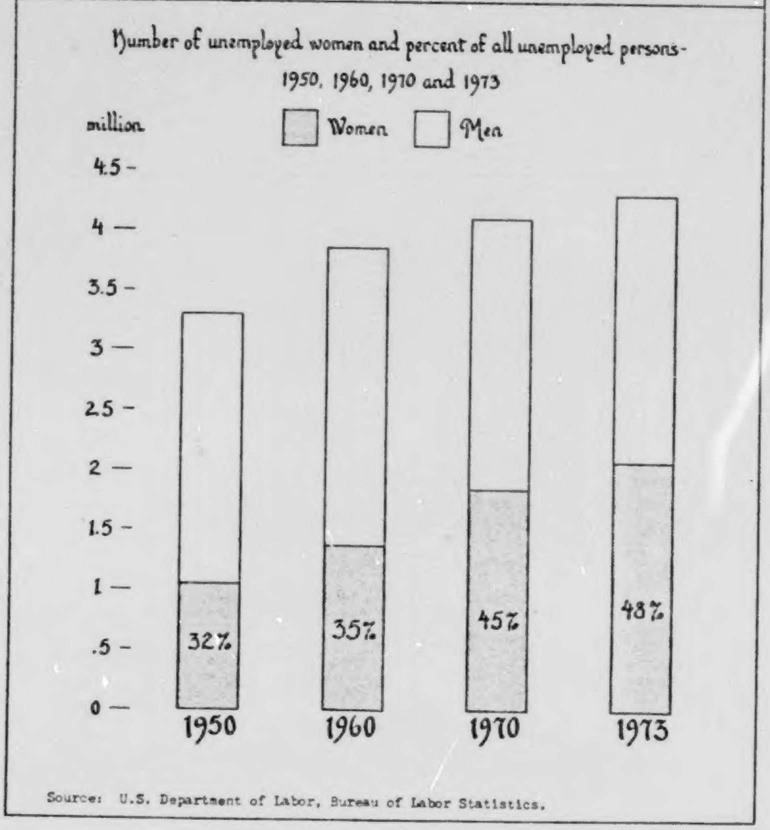
1) Married women (husband present) account for 56 percent all women workers (Figure 39).

2) 43 percent of all married women work.

3) Women living with spouse and having children tend to work in direct proportion to the age of children. Further, at all ages of children there is significant participation by mothers in the labor force (Figure 43 and Tables 34 and 35).

FIGURE 42

The Number of Unemployed Women Has Increased Greatly, and Women Account for an Increasing Proportion of All Unemployed Persons[18]



Number of unemployed women and percent of all unemployed persons- 1950, 1960, 1970 and 1973

Source: U.S. Department of Labor, Bureau of Labor Statistics.

4) Since 1950, labor force participation by women has risen from 23.8 to 43 percent. For those only with children under6, the rate has jumped from 11.2 percent in 1956, to 35 percent in 1974 (Figure 43).

TABLE 34

LABOR FORCE PARTICIPATION RATES OF MARRIED WOMEN, HUSBAND PRESENT, BY PRESENCE AND AGE OF CHILDREN, UNITED STATES, 1950 TO 1974[19]

Year	*Total*	*No Children under 18*	*Children 16-17 only*	*Children under 6 years*	
				and 6-17	*without 6-17*
1950	23.8	30.3	28.3	12.6	11.2
1960	30.5	34.7	39.0	18.9	18.2
1970	40.8	42.2	49.2	30.5	30.2
1974	43.0	43.0	51.2	32.9	35.7

f. Heads of Household

1) There were 6.9 million female-headed families in 1974.

2) 54 percent of these female heads work (Table 36).

3) 10 percent of all women workers are heads of families (3.7 million). Among these, 20 percent had incomes below 1973 poverty levels.

g. Working Mothers and Their Children

1) 13.6 million mothers with children under 18 are in the labor force

2) 5.1 million have children under age 6

3) 26.8 million children have working mothers

20.7 million children aged 6-17 have working mothers

FIGURE 43

Labor Force Participation Rates of Women Living with Spouse and Children 20

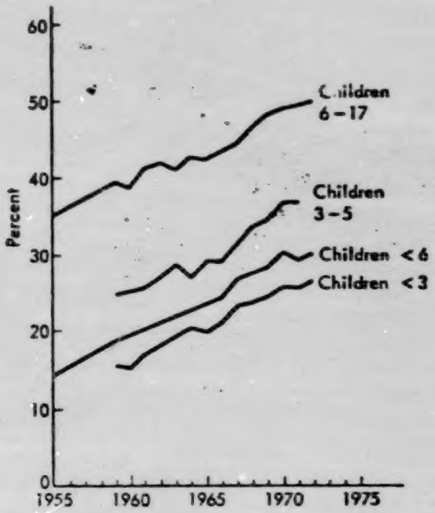


TABLE 35

Labor Force Participation Rates 21

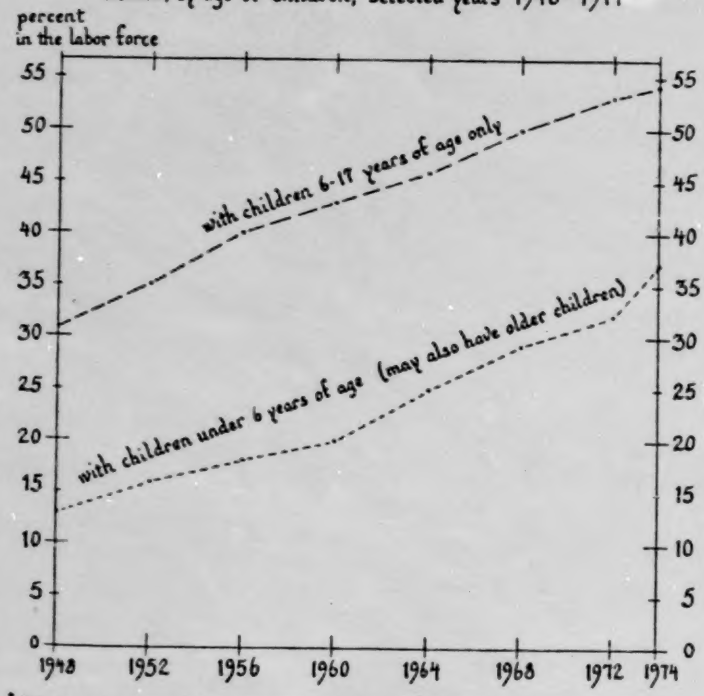
Age	Never Married	Married— Spouse Present			
		No Children	*Child under 3*	*Child 3-5*	*Child 6-17*
20-24	72	72	33	48	—*
25-34	86	77	—		54
35-44	78	60	—		53

**Note:* indicates not applicable or not available.

FIGURE 44

Mothers Are More Likely To Work Than Ever Before. More Than Half of All Mothers of School Age Children Were in the Labor Force in 1974.[22]

Civilian labor force participation rates of ever-married women, by age of children, selected years 1948-1974*



* Data cover March of each year except for April 1948 and 1952, and are for females 14 years of age and over except in 1968, 1972 and 1974, which are for 16 years and over.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

TABLE 36

—LABOR FORCE STATUS OF FEMALE FAMILY HEADS, BY AGE, MARCH 1974[23]

(Women 16 years of age and over)

Age	Number (in thousands)		Percent distribution		Percent in labor force
	Population	Labor force	Population	Labor force	
Total	6,798	3,679	100.0	100.0	54.1
16 to 24 years	601	299	8.8	8.1	49.8
25 to 34 years	1,484	936	21.8	25.4	63.1
35 to 44 years	1,418	939	20.9	25.5	66.2
45 to 54 years	1,255	867	18.5	23.6	69.1
55 to 64 years	904	531	13.3	14.4	58.7
65 years and over	1,136	107	16.7	2.9	9.4

Source: U.S. Department of Labor, Bureau of Labor Statistics: Special Labor Force Report No. 173.

6.1 million children under 6 have working mothers

4.6 million children had working mothers who were heads of families.

4) The financial need in the absence of a husband in female-headed families is reflected in the relatively high rate of labor force participation:

54% for female headed families; the comparable participation rate is

45% for all women and

43% for women with husbands present

g. Income

1) Women earn less than men in all categories and at every status level (Tables 37 and 38).

2) Black women earn less than white women in all categories.

3) Income differences between men and women have widened since 1956. In 1973, the median annual income of full time, year-round women workers was only 57 percent of that of men.

4) Some factors associated with the lower earnings of women workers:

    - job segregation (the confinement of females to a relatively few occupations, most of a low-pay status)
    - the social responsibility of females with families to perform the child care and housework functions

    Even when both husbandand wife are earning wages, the wife is responsible for the housework. According to Cornell University Studies, men devote an average of 1/2 hour each day to housework, and the average does not rise when their wives work.[24]

5) Husband/wife families earn substantially more than single parent families (See Table 39).

Black families earn substantially less than white families in all categories. Comparing all families in 1974, Black families earn about 58 percent as much as white families. Husband-and wife-working Black families earn 75 percent as much as comparable white families. If the wife is in the paid labor force, the Black/white gap shrinks somewhat so that the Black family was earning about 77 percent as much as the white families. In general all of these ratios are slightly down from the high of 1972 (See Figure 45).

h. Dual Income Families

Peter Morrison of the RAND Corporation has pointed out that:

> The conventional family model of husband-breadwinner and wife-homemaker to which 56 percent of husband-wife families conformed a quarter century ago, is valid for only 34 out of 100 today. It is being replaced by the multiworker family (in which, most typically, the husband and wife are workers, but in some cases the husband or wife and another family member).
>
> Family members other than the wife have not contributed much to the increasing proportion of multiworker families, however. As of 1975, in only 16 percent of multiworker families was there an additional worker who was not the wife.
>
> As the turn of this century, approximately one in 20 wives were classified as "gainfully employed;" by 1910 that fraction had increased to about one in 10. Since midcentury (after the influx of women into the labor force induced by World War II), the labor force participation rate of wives has advanced from 23.8 percent in 1950 to 44.4 in 1975, and the closely related percentage of husband-wife families with 2 workers or more has risen from 36.1 to 48.7 percent."[25]

As pointed out above, the long-term rise of the working wife has moved to:

TABLE 37

MEDIAN WAGE OR SALARY INCOME OF YEAR-ROUND FULL-TIME WORKERS,[1] BY SEX AND RACE, 1939 AND 1960–73 26

	Median income				As percent of white men			As percent of minority race men		As percent of white women
	Women		Men							
Year	White	Minority race	White	Minority race	White women	Minority race women	Minority race men	White women	Minority race women	Minority race women
1973	$6,544	$5,772	$11,633	$8,363	56.3	49.6	71.9	78.2	69.0	88.2
1972	6,131	5,320	10,786	7,548	56.8	49.3	70.0	81.2	70.5	86.8
1971	5,749	5,181	9,801	6,928	58.7	52.9	70.7	83.0	74.8	90.1
1970	5,490	4,674	9,373	6,598	58.6	49.9	70.4	83.2	70.8	85.1
1969	5,168	4,231	8,876	6,158	58.2	47.7	69.4	83.9	68.7	81.9
1968	4,700	3,677	8,014	5,603	58.6	45.9	69.9	83.9	65.6	78.2
1967	4,394	3,363	7,512	5,069	58.5	44.8	67.5	86.7	66.3	76.5
1966	4,152	2,949	7,164	4,528	58.0	41.2	63.2	91.7	65.1	71.0
1965	3,991	2,816	6,704	4,277	59.5	42.0	63.8	93.3	65.8	70.6
1964	3,859	2,674	6,497	4,285	59.4	41.2	66.0	90.1	62.4	69.3
1963	3,723	2,368	6,277	4,104	59.3	37.7	65.4	90.7	57.7	63.6
1962	3,601	2,278	6,025	3,799	59.8	37.8	63.1	94.8	60.0	63.3
1961	3,480	2,325	5,880	3,883	59.2	39.5	66.0	89.6	59.9	66.8
1960	3,410	2,372	5,662	3,789	60.2	41.9	66.9	90.0	62.6	69.6
1939	863	327	1,419	639	60.8	23.0	45.0	135.1	51.2	37.9

---

[1] Worked 35 hours or more a week for 50 to 52 weeks.

Source: U.S. Department of Commerce, Bureau of the Census: Current Population Reports, P-60, Nos. 90, 85, 80, 75, 66, 60, 53, 51, 47, 43, 41, 39, 37, 27, and P-60, No. 33 (Advance report).

TABLE 38

THE RELATIVE INCOME OF WHITE AND NEGRO WOMEN, 1972 [27]

(Year-round, Full-Time Workers)

	White Females	White Males	Ratio	Negro Females	Negro Males	Ratio
Northeast	$6,440	$11,283	.57	$6,063	$7,730	.78
North Central	6,190	11,151	.56	5,949	9,084	.65
South	5,631	9,690	.58	4,405	6,043	.73
West	6,873	11,834	.58	6,889	9,056	.76

Source: "Money Income in 1972 of Families and Persons in the U.S.," CPR, Consumer Income, Series P-60, no. 87, Washington, D.C.: Bureau of the Census, June 1973, table 7.

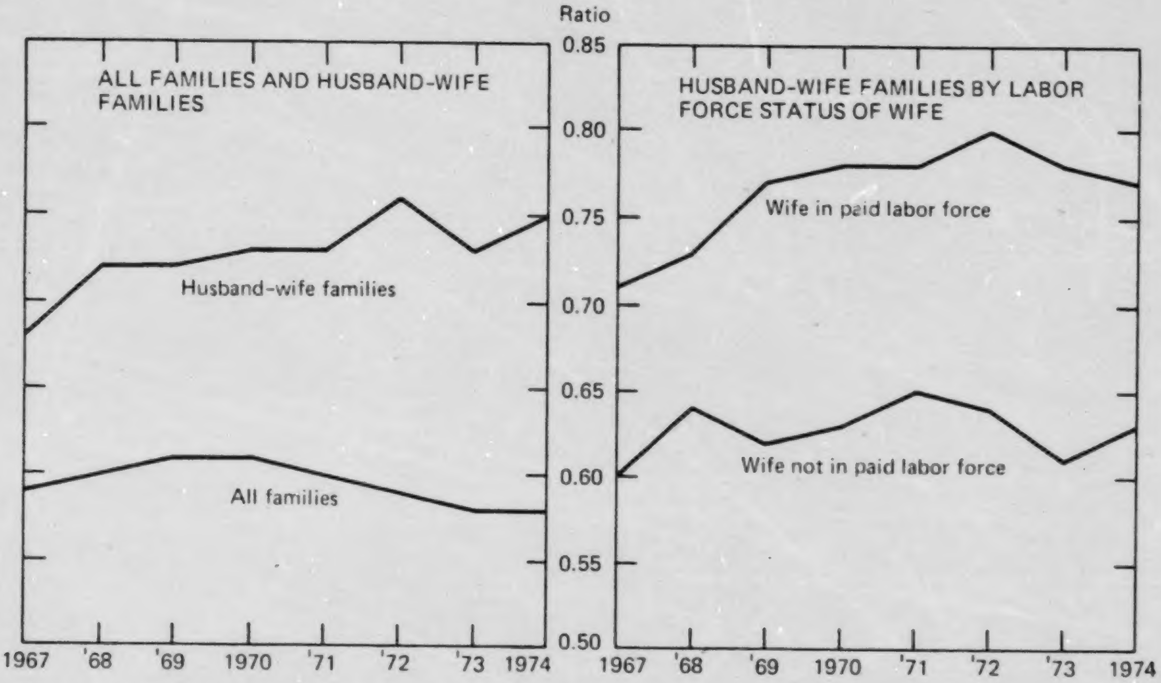
TABLE 39

MEAN FAMILY INCOME, 1973 [28]

		Single-Parent Families	
Age of Head	**Husband-Wife Families**	**Male-Headed**	**Female-Headed**
Under 25	$ 8,922	$ —	$3,198
25-44	15,114	11,931	5,951
45-64	17,761	12,078	7,205

Source: "Money Income in 1973 of Families and Persons in the U.S.," *Current Population Reports*, Series P-60, no. 97, table 29, Washington, D.C.: U.S. Bureau of the Census.

FIGURE 45. Ratio of Median Family Income of Blacks and Whites, by Type of Family and Labor Force Status of Wife: 1967 to 1974[29]



Source: U. S. DEPARTMENT OF COMMERCE, Social and Economic Statistics Administration, Bureau of the Census

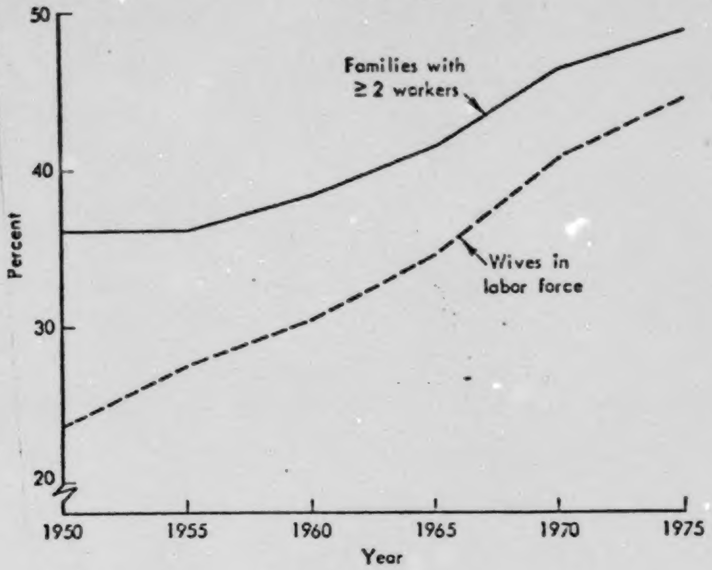
...progressively younger ages (Table 35). During the 1950's, labor force participation rates of wives were rising the fastest for older women. After 1965, however, the sharpest increases occurred among women under 35. In overly simplified terms, the secular rise of working wives used to depend heavily on changes in wives' activities after childbearing and early childrearing. More recently, it has come about because of changes in women's activities during these stages of the family life cycle; as such, it is indicative of a basic shift in the way that young wives order their careers as mothers or income-earners. Traditionally, childbearing among earlier cohorts was accompanied by a complete withdrawal from the work force for a period of years (the time being extended by each successive child). Because such withdrawal covered those years in which job advancement would be most rapid, women lost the opportunity to establish their careers or to gain seniority or experience before they withdrew. More recently, married women in their thirties and older, often with schoolage children, are in the labor force, either because they have returned after a brief absence or because they never left.

Why Dual Income Families?

The rise of working wives probably results from several interrelated social and economic changes in recent years. More money is assumed to be good. Table 42 shows that when the husband was the only earner, median family income in 1974 averaged $12,360, compared with $14,885 (20 percent higher) when both husband and wife had earned.

o More flexibility in family living has encouraged wives to expand their role in the job market. One indication of this is found in the sharply rising rates of labor force participation among wives in their early twenties with preschool children at home--up from 24 percent in 1964 to 37 percent in 1974.

FIGURE 46



— Increase in percent of wives in labor force and percent of husband-wife families with 2 or more workers: 1950 – 1975[30]

TABLE 40

PERCENTAGE POINT CHANGES IN LABOR FORCE PARTICIPATION RATES OF WIVES 16 TO 64 YEARS OLD FOR 5-YEAR INTERVALS, 1950-75[31]

Period (March to March)	16 to 19 years	20 to 24 years	25 to 34 years	35 to 44 years	45 to 64 years
1950-55[1]	−4.2	0.9	2.2	5.2	7.2
1955-60	2.8	0.6	1.7	2.5	5.2
1960-65	1.7	5.6	4.4	4.4	4.8
1965-70	9.0	11.8	7.2	6.6	5.1
1970-75	9.6	9.7	9.0	4.9	0.0

[1] The reference month for 1955 is April.

NOTE: Data for years prior to 1967 include persons 14 years old and over; in accordance with the change introduced in 1967, data for subsequent years include only persons 16 years old and over.

- There is growing disinclination among college women to confine their activities to the home and family. Annual national surveys show that far fewer first-year college women endorse that traditional role now than they did even in the recent past (only 18 percent in 1975 compared with 44 percent in 1967).
- Rising demand for female workers and declining fertility add strongly to this trend.
- The rapid expansion of jobs in those industry sectors (especially the service sector) in which women most often hold jobs has been a further stimulus to female labor force participation.
- The trend toward smaller families must be viewed as both a permissive influence, enabling young wives to work outside the home, and a product of their involvement with the labor market.
- The future worklives of men and women will likely come to resemble each other more and more, both in terms of occupational distribution and time spent in the labor force. Greater attachment to career makes for more advancement in careers. Increasingly higher incomes may result.

The median income of families with working wives has increased faster than for families in which wives were not in the paid labor force. Between 1950 and 1974, median annual income (adjusted for inflation) of families more than doubled for the former group, but increased by only 80 percent for the latter Table 42). Women's rapidly increasing representation in higher-paying professional occupations is likely to widen this income difference between families with two workers and those with only one.

P. Morrison of Rand speculated "...the proliferation of multiworker families will necessitate more daily travel, since for many such families there will be two daily journeys to work instead of one. Also, since multiworker families will place greater value on proximity to employment, this change in the division of labor within families could even feed back on residential settlement patterns, influencing where families choose to live in relation to major employment centers within a metropolitan area."

Such resettlement patterns could influence the choice of schools by prosperous middle-class families.

TABLE 41

MEDIAN FAMILY INCOME BY WIFE'S LABOR FORCE STATUS [32]

	Median family income (in 1974 dollars)	
	Wife in paid labor force	*Wife not in paid labor force*
1950	$ 8,200	$ 6,791
1960	11,490	9,192
1965	13,437	10,303
1970	15,759	11,816
1974	16,928	12,082

Source: Hayghe, op. cit.

TABLE 42

MEDIAN INCOME OF HUSBAND-WIFE FAMILIES--IN 1974 BY NUMBER OF EARNERS AND RELATIONSHIP TO HUSBAND [33]

Relationship to husband	Median family income			Number of husband-wife families (thousands)		
	1 earner	2 earners	3 earners or more	1 earner	2 earners	3 earners or more
Total	$11,955	$15,120	$20,975	15,637	19,873	7,199
Husband only	12,360	....	....	13,988	....	....
Wife only	8,275	....	....	1,193	....	....
Other relative only	11,855	....	....	451	....	....
Husband and wife earners	....	14,835	21,045	....	16,693	5,527
Husband and others, not wife............	....	17,335	20,935	....	2,876	1,551
Husband not an earner....	....	11,685	15,055	....	304	121

NOTE: Family income was $5,520 in 1974 for the 4.3 million husband-wife families that had no earners.

Source: Hayghe, op. cit., Table 7.

V. IMMIGRATION, LANGUAGE AND CULTURE

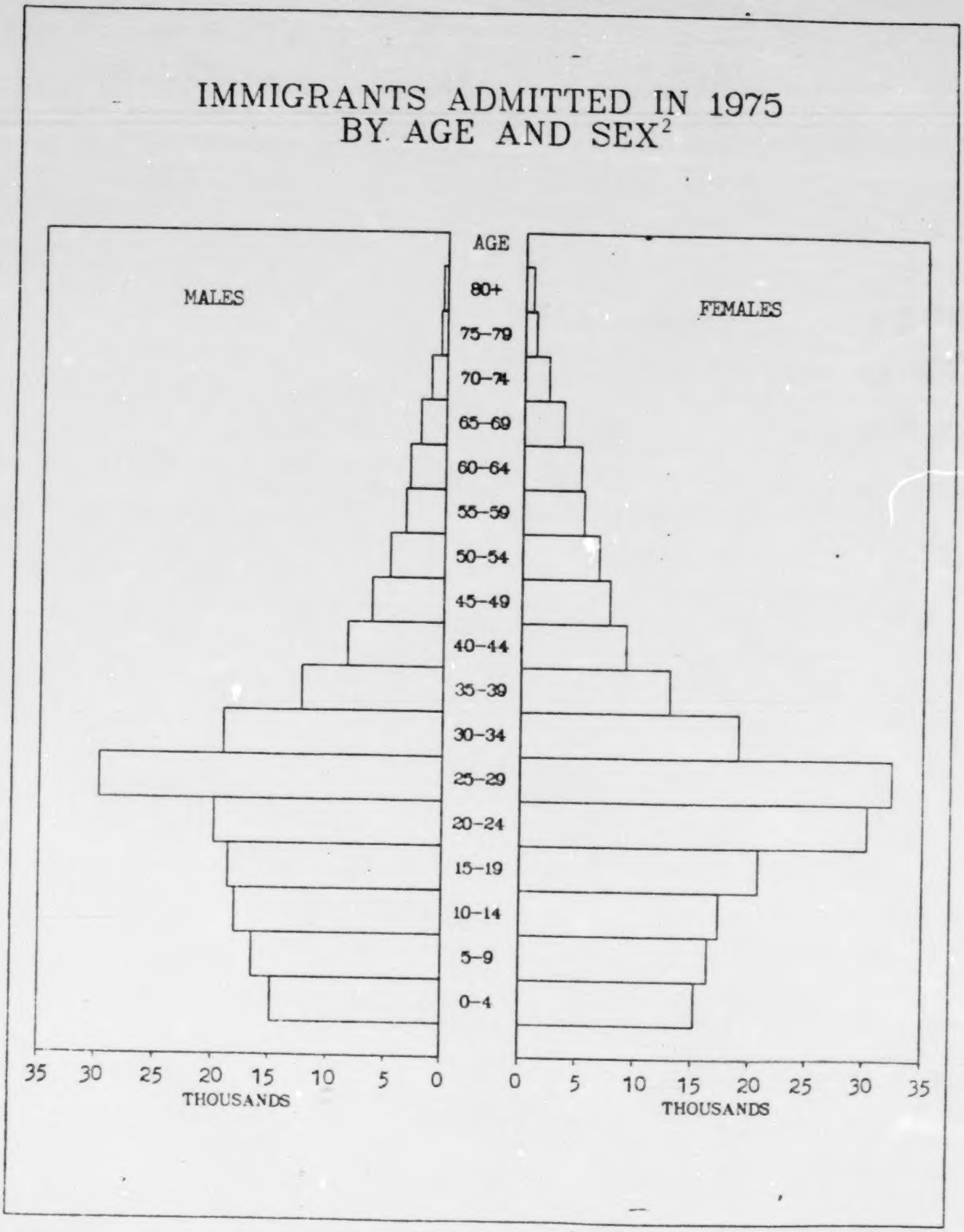
Immigration will undoubtedly continue to influence elementary and secondary schools, especially in large cities.[1]

Approximately 25 percent of the annual population increase in the United States is due to immigration. In 1970, approximately 10 million persons living in the United States were foreign born, only 5 percent of these were of school age (5 to 19 years old). Roughly 400,000 persons are admitted to the United States each year. About 36 percent of them are under 20 years old, and are thus likely to directly or soon enroll in schools (Figure 47). Furthermore, the age distribution of the recent immigrant population is slightly younger than the average age distribution of the native population (compare Figure 1 with Figure 47). Hence, that population, all other things being equal, is likely to be about as fecund as native Americans. The average number of children born to foreign born women 25 to 44 years old was 2.1 as of 1970 compared with 2.6 for native women the same age.

There are no reliable estimates of the number of persons who enter the United States each year through illegal channels. Furthermore many enter and leave repeatedly. But illegal immigrants will further aggravate any school problems associated with immigrants.

More than half of the immigrants of school age in 1975 came from Spanish speaking countries--Mexico, South America, the Philippines or

FIGURE 47



IMMIGRANTS ADMITTED IN 1975 BY AGE AND SEX[2]

TABLE 43

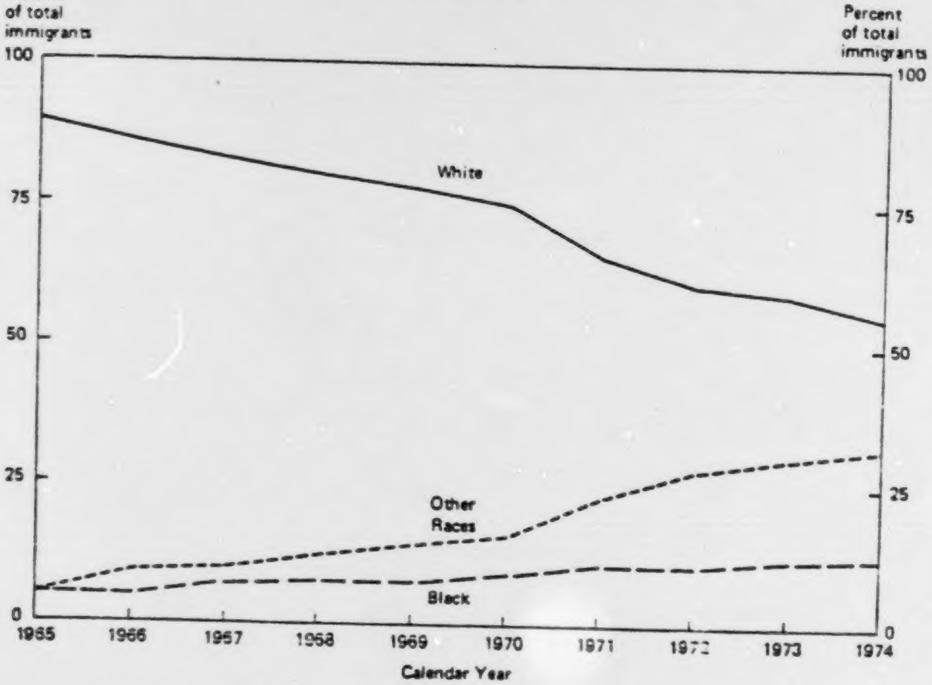
POPULATION OF SPANISH ORIGIN BY SEX AND TYPE OF SPANISH ORIGIN: MARCH 1974

(Numbers in thousands. Civilian noninstitutional population)[3]

Type of origin	Total		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Persons of Spanish origin....	10,795	100.0	5,285	100.0	5,510	100.0
Mexican..........................	6,455	59.8	3,259	61.7	3,196	58.0
Puerto Rican.....................	1,548	14.3	717	13.6	830	15.1
Cuban............................	689	6.4	326	6.2	362	6.6
Central or South American..........	705	6.5	341	6.5	364	6.6
Other Spanish....................	1,398	13.0	641	12.1	757	13.7

FIGURE 48

Estimated Immigration, by Race: 1955 to 1974 [4]



Spain (Table 43). Since 1965 white immigration has declined while Black immigration and other races have increased (Figure 48).

Immigrants concentrate in large cities as shown in Table 44. In 1975 of the 386,194 legal immigrants:

- 34 percent located in the ten largest U.S. metropolitan areas
- 37 percent were located in the 15 largest areas
- 45 percent were located in cities with a population greater than a million.

A. Implications of Immigration and Non-English Speaking Student Populations on the School System

- Since immigrants to a very large extent settle in metropolitan areas and more specifically in inner cities, continuing immigration will provide a chronic source of stress for big city school systems.
- The relationships between immigration, foreign language and educational success raise to some high priority the question of the role, function, and style of bilingual education, what it accomplishes, and what the opportunity costs are, i.e., what the student does not get at the price of bilingual teaching. A further factor influencing the interpretation of these relationships is the long-term movement of the United States into an information based society. Right now some 55 percent of the work force is in the information business. In an information society, presumably the widest road to upward

TABLE 44

IMMIGRATION PATTERNS TO LARGEST U. S. CITIES[5]

City	Total Population	(1975) Number of Immigrants (choice of residence)
New York	9,973,577	73,630
Los Angeles-Long Beach	7,032,075	19,328
Chicago	6,988,947	17,083
Philadelphia	4,817,914	2,954
Detroit	4,431,390	2,754
San Fran.-Oakland	3,109,519	9,887
Washington, D.C.	2,908,801	2,549
Boston	2,899,101	1,580
St. Louis	2,410,163	830
Pittsburg	2,401,245	701
		131,296
Dallas-Ft. Worth	2,377,979	2,209
Baltimore	2,070,670	1,796
Cleveland	2,064,194	1,226
Newark	2,054,928	3,278
Houston	1,999,316	4,059
		12,568
		131,296
		12,568
		143,864 Total Number Immigran for 15 largest metro areas.

mobility is the ability to collect, handle, utilize, interpret and be facile with information, the bulk of which is in some printed form and in English.

- The implications of the stress of meeting the education of foreign born and non-English speaking students in bilingual programs in systems of limited and strained resources are by no means trivial.
- It is not clear whether the social goals of bilingual education or alternative education strategies with foreign language students are clearly and sharply enough understood. The personal objectives of the students and their families and the potential options open in alternative school programs may not be well enough understood or integrated into school planning.
- Should the education of foreign language students, particularly in big cities, overstress the system so that the job is done badly, it may also reduce the level of education of English-speaking students and further accelerate the decline of the large urban school systems.
- On the other hand, the presence of large foreign born populations creates an opportunity for local school districts to provide English citizenship and other types of secondary school courses for foreign born or non-English speaking adults. This may provide an interesting means of using school buildings and facilities more extensively in a period of overall enrollment decline.

- The fact that bilingual education is available in school systems may provide special appeal to English speaking middle-class families who put some particular value on a second language. This objective ought not obscure the major social objectives of mono or multi or bilingual teaching.
- One may anticipate that the continual immigration of foreign born students will create continual renewal of the kinds of cross cultural stresses associated with hard to acculturate students, i.e., delinquency, and poor school performance, particularly for urban school systems. Closer attention could be paid to this situation.
- If this point is not clear whether proposals to regularize or change the status of illegal immigrants might not have an effect on school systems by promoting marriage and family formation and a higher rate of entry of children of now illegal immigrants into the school system. Again this will especially affect big city systems and the smaller communities in the Southwest and in California.

B. Ethnic Make-Up of the School Age Population

A 1975 summary of the ethnic composition of school age population--4 years old or older--shows that it was 11 percent Black, 5 percent Spanish origin and 1 percent selected Asian (Chinese, Japanese, Philippino or Korean). These are of course not all immigrants.

As shown in Figures 49 and 50, these are relatively young populations. Over 40 percent of the Spanish population is between 4 and 18 years old and 54 percent is less than 25 years old. Fifty-one percent of Blacks are less than 25 years old, and 40 percent of the selected Asians are below 25.

The overt impact of immigration and foreign language-speaking students on schools may be seen in these principal ways:

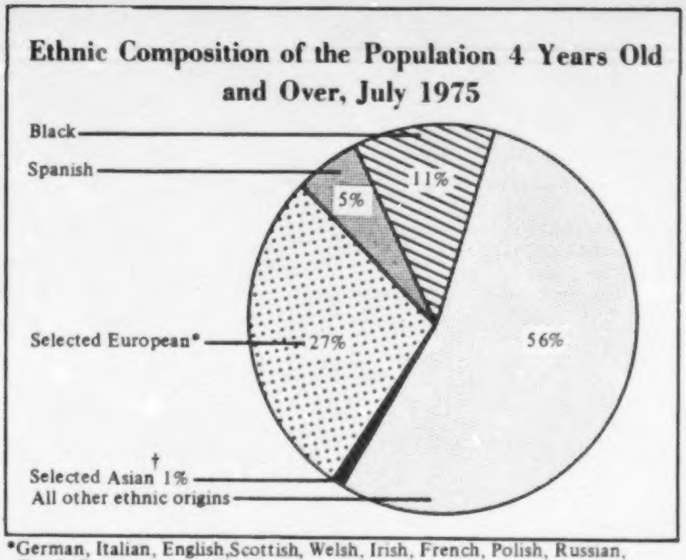
- Language difficulties,
- Behavioral problems associated with the acculturation and socialization of children,
- Unanticipated growth of school age population especially where affected by the uncertainty of illegal immigrants.

C. Language

A sense of the major languages in use in the United States in households can be seen from Table 45. Some 25 million of those 4 years and older use some language other than English as their usual household language. Two hundred and sixty-eight million use English only. The dominant non-English languages are Spanish, French, German, and Italian.

The immigration of foreign language speaking students is dominated by those speaking Spanish languages and dialects; Mexicans and Puerto Ricans will assure continuing major regional problems on issues of bilingual as well as multicultural education (Figure 51).

FIGURE 49



*German, Italian, English,Scottish, Welsh, Irish, French, Polish, Russian, Greek, Portuguese

† Chinese, Japanese, Filipino, Korean

FIGURE 50

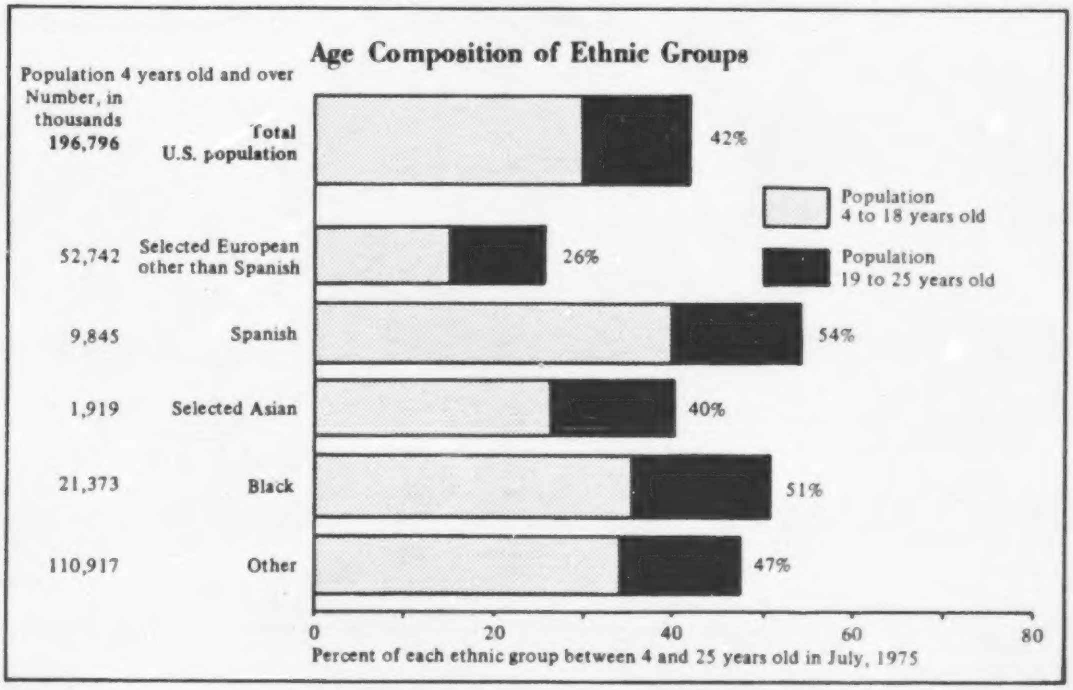
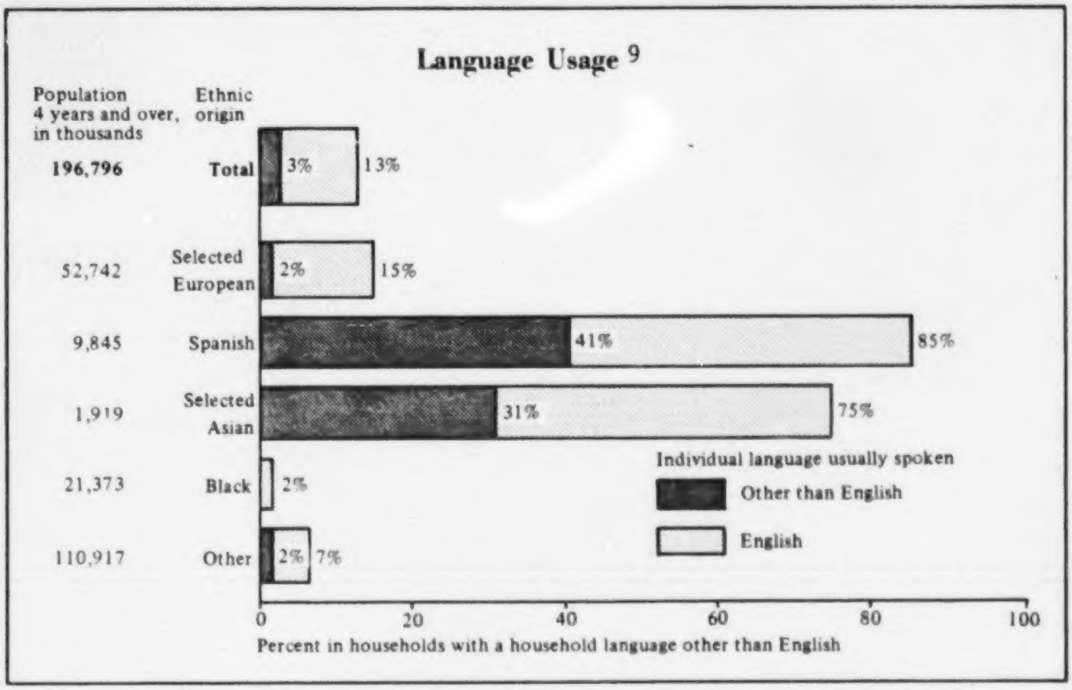


TABLE 45

Household Languages of the Population: July 1975[8]

Language spoken in households	Total population, 4 years old and over	School-age population, 4 to 25 years old
Total	**196,796,000**	**83,150,000**
English only	167,665,000	71,404,000
Non-English as usual or other language. . . .	25,347,000	10,639,000
Spanish	9,904,000	5,162,000
French	2,259,000	967,000
German	2,269,000	794,000
Greek	488,000	189,000
Italian	2,836,000	952,000
Portuguese	349,000	117,000
Chinese	534,000	219,000
Filipino	377,000	174,000
Japanese.	524,000	213,000
Korean.	246,000	107,000
Other.	5,559,000	1,741,000
Not reported	3,786,000	1,106,000

FIGURE 51


Language Usage 9
Population 4 years and over, in thousands
Ethnic origin
196,796
Total
3%
13%
52,742
Selected European
2%
15%
9,845
Spanish
41%
85%
1,919
Selected Asian
31%
75%
21,373
Black
2%
110,917
Other
2%
7%
Individual language usually spoken
Other than English
English
0
20
40
60
80
100
Percent in households with a household language other than English

The recent data reported from the National Center for Educational Statistics Surveys shows interesting relationships between household language and education.

People who speak a language other than English do not participate in the educational system to the same extent as those who usually speak English (Figure 52 and Table 46).

By age 14 to 18, only 79 percent of those from families speaking a language other than English and who themselves usually speak a language other than English attend school. In contrast 91-93 percent of those from English-speaking families or who speak English at home attend.

However, similar relationships may be seen among those of the more selected group of Spanish origin or Spanish language use (Figure 53).

The implication of foreign language for school performance in terms of the percentage of students two or more grades below their age mode is shown in Figure 54 and Table 47.

Among those of European origins, approximately 8 to 10 percent are below mode from grade one to twelve. Among Blacks, most are in mode through the eighth grade. By grade 12, however, approximately 24 percent are below mode through the 8th grade. By grade 12, however, approximately 24 percent are below mode. This

FIGURE 52

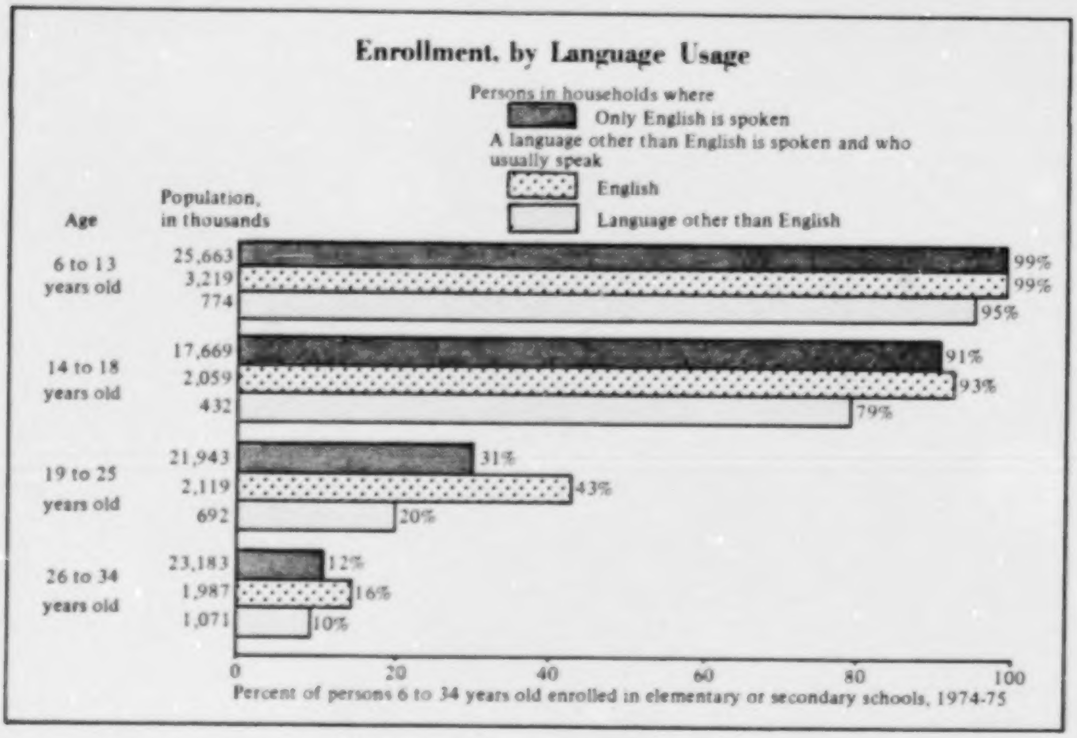

Enrollment, by Language Usage
Persons in households where
Only English is spoken
A language other than English is spoken and who usually speak
English
Language other than English
Age
Population, in thousands
6 to 13 years old
25,663
3,219
774
99%
99%
95%
14 to 18 years old
17,669
2,059
432
91%
93%
79%
19 to 25 years old
21,943
2,119
692
31%
43%
20%
26 to 34 years old
23,183
1,987
1,071
12%
16%
10%
0
20
40
60
80
100
Percent of persons 6 to 34 years old enrolled in elementary or secondary schools, 1974-75

TABLE 46 --Number and percent of 4- to 34-year-olds enrolled in school during 1974-75 by their household and individual language characteristics and age: July 1975 [11]

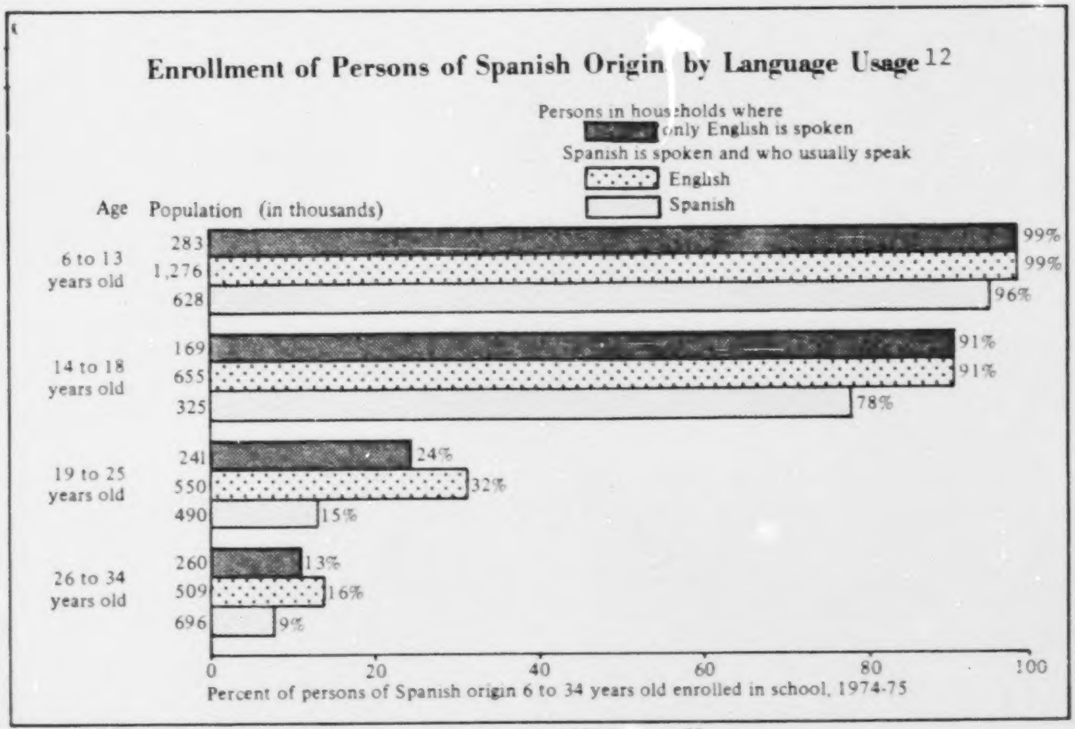
Age and enrollment	Total	English only household language	A Non-English language is spoken in the household				Household language not reported
			Total	Usual language spoken by individual			
				English	Non-English	Not reported	
(Numbers in thousands)							
Total 4 to 34 years old	**110,002**	**94,582**	**13,857**	**9,999**	**3,245**	**613**	**1,563**
Number enrolled	**62,223**	**53,557**	**8,308**	**6,614**	**1,392**	**302**	**358**
Percent enrolled	**57**	**57**	**60**	**66**	**43**	–	–
4 and 5 years old	**7,065**	6,125	929	614	275	(*)	(*)
Number enrolled	**2,744**	2,374	365	275	72	(*)	(*)
Percent enrolled	**39**	39	39	45	26	–	–
6 to 13 years old	**29,879**	25,663	4,156	3,219	774	163	60
Number enrolled	**29,542**	25,391	4,092	3,199	738	155	60
Percent enrolled	**99**	99	98	99	95	–	–
14 to 18 years old	**20,874**	17,669	2,583	2,059	432	92	622
Number enrolled	**18,724**	16,133	2,325	1,918	342	65	266
Percent enrolled	**90**	91	90	93	79	–	–
19 to 25 years old	**25,331**	21,943	2,972	2,119	692	161	416
Number enrolled	**7,939**	6,828	1,085	910	137	(*)	(*)
Percent enrolled	**31**	31	37	43	20	–	–
26 to 34 years old	**26,852**	23,183	3,216	1,987	1,071	158	453
Number enrolled	**3,274**	2,831	441	313	103	(*)	(*)
Percent enrolled	**12**	12	14	16	10	–	–

* Estimates less than 50,000.

NOTE.–This *July 1975 Survey of Languages*, a supplement to the Census Population Survey was conducted by the Bureau of the Census for the National Center for Education Statistics.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *July 1975 Survey of Languages*, preliminary data.

FIGURE 53



Enrollment of Persons of Spanish Origin by Language Usage[12]

Source of Data: National Center for Education Statistics, July 1975 Survey of Languages

FIGURE 54

Students Two Grades Below Modal Grade, by Ethnic Origin[13]

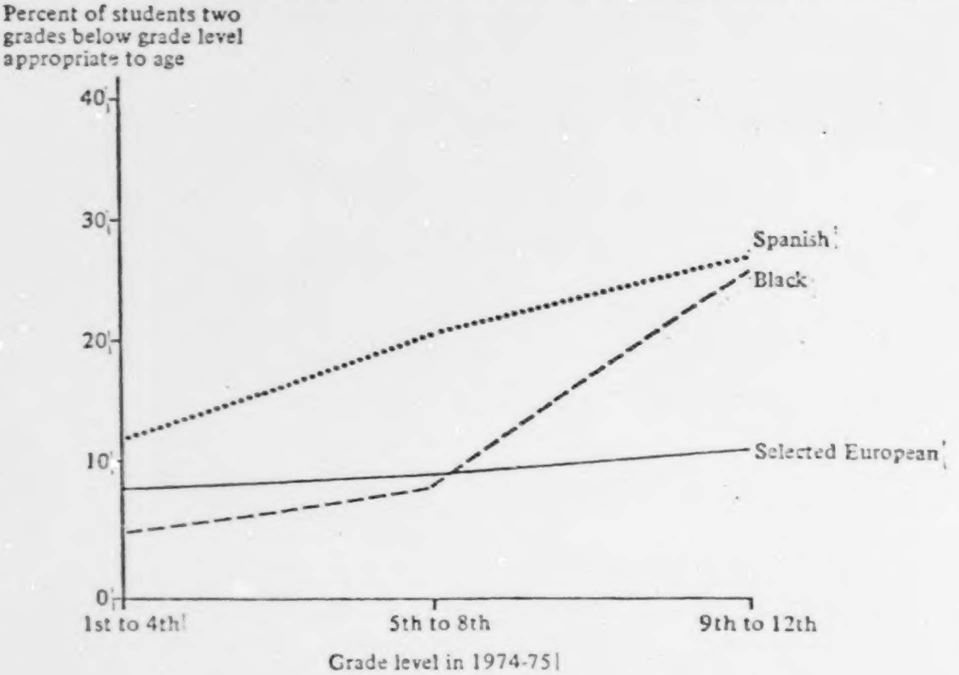


TABLE 47 -**Students in grades 1 to 12 who are 2 grades below modal grade,[1] by ethnic origin: 1974-75** 14

Ethnic origin	**Total grades 1 to 12**			Grades 1 to 4			Grades 5 to 8			Grades 9 to 12		
	Total enrolled	**Enrolled below**	**Percent enrolled below**	Total enrolled	Enrolled below	Percent enrolled below	Total enrolled	Enrolled below	Percent enrolled below	Total enrolled	Enrolled below	Percent enrolled below
	(Numbers, in thousands)											
Total	**36,077**	**5,540**	**15**	**14,366**	**1,307**	**9**	**16,314**	**2,021**	**12**	**15,397**	**2,212**	**14**
Selected European[2] . . .	**6,324**	**602**	**10**	1,871	149	8	2,233	196	9	2,220	250	11
Spanish[3]	**3,067**	**581**	**19**	1,090	128	12	1,184	241	20	793	212	27
Selected Asian[4]	**414**	**58**	**14**	134	(*)		125	(*)		155	(*)	
Black	**12,354**	**1,196**	**10**	5,072	264	5	5,235	409	8	2,047	523	26
Other	**29,345**	**3,017**	**10**	9,008	742	8	10,349	1,109	11	9,988	1,166	12
Don't know/ no answer	**572**	**101**	**18**	191	17	9	188	48	26	193	36	19

* Estimated at less than 50,000.

[1] Persons 8 years old and older in the first grade, 9 years old or older in the second grade, etc.

[2] German, Italian, English, Scottish, Welsh, Irish, French, Polish, Russian, Greek, Portuguese.

[3] Mexican American, Chicano, Mexican, Mexicano, Puerto Rican, Cuban, Central/South American, Other Spanish.

[4] Chinease, Filipino, Japanese, Korean.

NOTES.–Details may not add to totals because of rounding.
–This *July 1975 Survey of Languages*, a supplement to the Current Population Survey was conducted by the Bureau of the Census for the National Center for Education Statistics.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *July 1975 Survey of Languages*, preliminary data.

suggests that different policies of promotion are followed in the lower and upper grades. The situation for Spanish speaking people however, is far worse. From the first to the 12th grade, there is a continual rise from 12 to 25 percent of those who are two or more grades below mode. This is further reinforced by looking at the grade level in relations to household language (Figure 55). For those students whose household language is English, 9 to 12 percent are below grade throughout the grades. The rate for students for whom Spanish or some other non-English language is the household language rises steadily from 15 to 18 percent in grades 1 through 4 to 35 percent are below grade throughout the grades. The rate for students for whom Spanish or some other non-English language is the household language rises steadily from 15 to 18 percent in grades 1 through 4 to 35 percent below grade by the 12th grade.

A further association with not having a full command of English is the high school drop-out rate. According to the National Center of Statistics' report in 1975, Survey of Languages, "...about 10 percent of the school population 14 to 25 years old has completed less than four years of high school and were not enrolled during the 1974-75 school year. The rate was twice as great (24 percent) for those of Spanish origin and over four times as great (45 percent) for those who usually spoke Spanish (Figure 56).

The relationships between immigration, foreign language, household language, and educational success raise to some high priority the question of the role, function, and style of bilingual education,

FIGURE 55

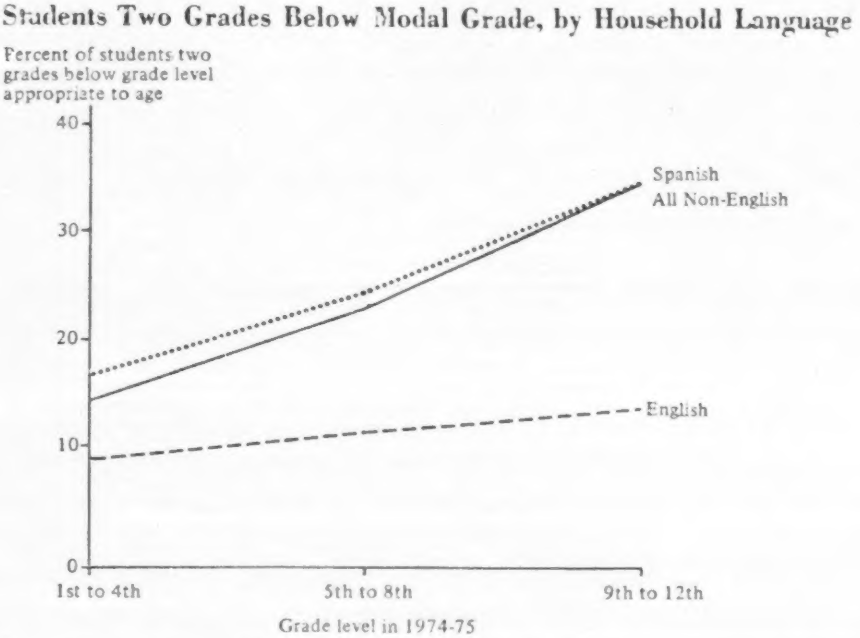

Students Two Grades Below Modal Grade, by Household Language
Percent of students two grades below grade level appropriate to age
40
30
20
10
0
Spanish
All Non-English
English
1st to 4th
5th to 8th
9th to 12th
Grade level in 1974-75

FIGURE 56

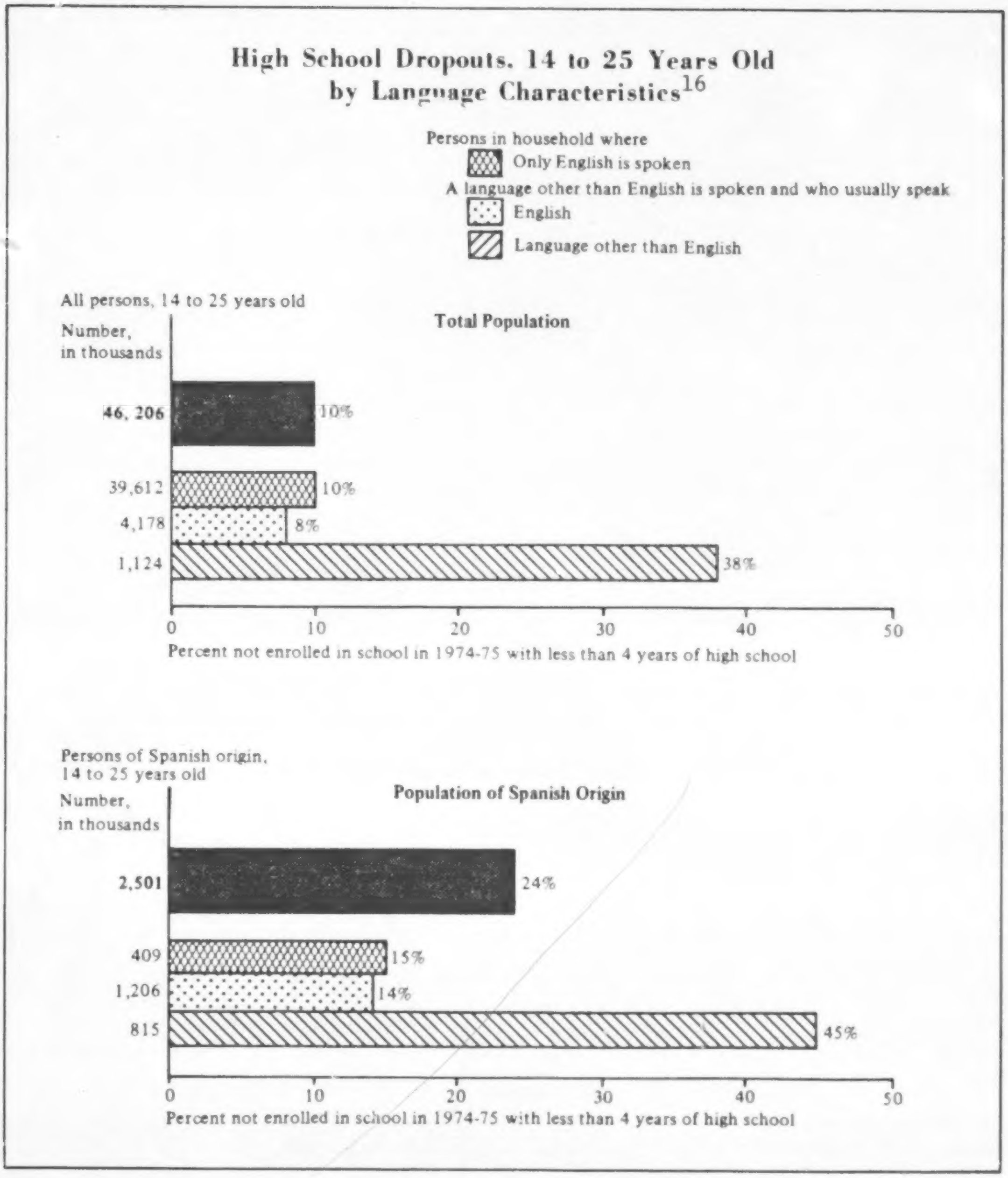

High School Dropouts, 14 to 25 Years Old
by Language Characteristics16
Persons in household where
Only English is spoken
A language other than English is spoken and who usually speak
English
Language other than English
All persons, 14 to 25 years old
Number, in thousands
Total Population
46, 206
10%
39,612
10%
4,178
8%
1,124
38%
0
10
20
30
40
50
Percent not enrolled in school in 1974-75 with less than 4 years of high school
Persons of Spanish origin, 14 to 25 years old
Number, in thousands
Population of Spanish Origin
2,501
24%
409
15%
1,206
14%
815
45%
0
10
20
30
40
50
Percent not enrolled in school in 1974-75 with less than 4 years of high school

Table 48

NON-ENROLLMENT STATUS OF THE POPULATION 3 TO 34 YEARS OLD, BY AGE, RACE, SPANISH ORIGIN: OCTOBER 1975 17/

Age, sex, race, and Spanish origin	Population	Not enrolled in school					
		Total		High school graduate		Not high school graduate	
		Number	Percent	Number	Percent	Number	Percent
SPANISH ORIGIN							
Total, 3 to 34 years	6,825	3,084	45.2	1,345	19.7	1,738	25.5
3 and 4 years	441	320	72.7	-	-	320	72.7
5 and 6 years	507	40	7.9	-	-	40	7.9
7 to 9 years	689	3	0.4	-	-	3	0.4
10 to 13 years	1,040	8	0.8	-	-	8	0.8
14 and 15 years	490	21	4.4	2	0.4	20	4.1
16 and 17 years	515	71	13.8	3	0.6	68	13.2
18 and 19 years	489	274	56.0	127	25.9	147	30.1
20 and 21 years	410	297	72.5	168	40.9	130	31.6
22 to 24 years	547	470	85.9	242	44.2	228	41.7
25 to 29 years	894	820	91.7	437	48.8	383	42.9
30 to 34 years	803	759	94.5	367	45.8	391	48.7
MEXICAN							
Total, 3 to 34 years	4,203	1,900	45.2	724	17.2	1,176	28.0
3 and 4 years	284	217	76.2	-	-	217	76.2
5 and 6 years	328	25	7.5	-	-	25	7.5
7 to 9 years	441	3	0.7	-	-	3	0.7
10 to 13 years	644	6	0.9	-	-	6	0.9
14 and 15 years	297	15	5.0	-	-	15	5.0
16 and 17 years	322	50	15.4	1	0.4	49	15.0
18 and 19 years	305	175	57.4	75	24.7	100	32.7
20 and 21 years	257	197	76.4	110	42.8	87	33.9
22 to 24 years	335	299	89.4	134	40.0	165	49.4
25 to 29 years	528	479	90.7	224	42.5	254	48.2
30 to 34 years	461	435	94.3	180	39.0	255	55.3
WHITE							
Total, 3 to 34 years	96,815	45,335	46.9	32,935	34.1	12,401	12.8
3 and 4 years	5,518	3,821	69.2	-	-	3,821	69.2
5 and 6 years	5,795	301	5.2	-	-	301	5.2
7 to 9 years	8,654	54	0.6	-	-	54	0.6
10 to 13 years	13,387	95	0.7	-	-	95	0.7
14 and 15 years	7,145	122	1.7	3	-	118	1.7
16 and 17 years	7,063	754	10.7	159	2.3	594	8.4
18 and 19 years	6,855	3,670	53.5	2,665	38.9	1,005	14.7
20 and 21 years	6,593	4,495	68.2	3,521	53.4	975	14.8
22 to 24 years	9,255	7,749	83.7	6,581	71.1	1,168	12.6
25 to 29 years	14,578	13,119	90.0	11,080	76.0	2,039	14.0
30 to 34 years	11,993	11,205	93.4	8,975	74.8	2,229	18.5
BLACK							
Total, 3 to 34 years	14,553	6,144	42.2	3,350	23.0	2,793	19.2
3 and 4 years	1,007	663	65.8	-	-	663	65.8
5 and 6 years	1,029	57	5.5	-	-	57	5.5
7 to 9 years	1,505	11	0.7	-	-	11	0.7
10 to 13 years	2,286	21	0.9	-	-	21	0.9
14 and 15 years	1,182	31	2.6	-	-	31	2.6
16 and 17 years	1,137	149	13.1	33	2.9	116	10.2
18 and 19 years	1,030	544	52.9	283	27.5	261	25.4
20 and 21 years	967	704	72.9	427	44.1	277	28.7
22 to 24 years	1,216	1,043	85.8	705	58.0	338	27.8
25 to 29 years	1,726	1,555	90.1	1,083	62.7	472	27.3
30 to 34 years	1,452	1,355	92.9	819	56.2	536	36.9

what it accomplishes, and what the opportunity costs are, i.e., what the student does not get at the price of bilingual teaching.

A further factor influencing the interpretation of these relationships is the long-term movement of the United States into an information-based society. In an information society, presumably the widest road to upward mobility is the ability to collect, handle, utilize, interpret and be facile with information, the bulk of which is in some printed form and in English.

The rates of non-enrollments in high school for Spanish origin, Mexican, whites and Blacks are shown in Table 48.

Behavior

The importance of cultural shock among immigrants of the Chinese communities, particularly in New York City, is clear. The influx of large numbers of youths from Hong Kong results in all of the classic dislocations of foreign language speaking, hard-to-acculturate students. The consequence is that what had been a model community, in terms of behavior, is experiencing an unfamiliar upswing in delinquency. One could anticipate the parallel and associated difficulties within the school system. Patterns of immigration, therefore, need to be better understood in terms of anticipating declining and growing needs of special services. Although the rate of immigration is low (Figure 3), because immigrants tend to collect in cities, one may anticipate continuing localized problems in already sorely troubled areas.

VI. LOCAL MOBILITY AND INTERNAL MIGRATION

America has always been a nation on the move. The pattern both in general and in detail is now undergoing substantial change. While population shifts can be measured at the national level with relatively high reliability, it is the details of these movements that are felt most palpably at the local level. For this reason internal migration is a crucial factor to understanding the demographic pressures on educational institutions in the United States. Local mobility and internal migration are perhaps the two most important factors in producing state, regional and local deviations from large-scale, national demographic trends.[1]

Convenient categories in which to examine the situation are:

- Urban - suburban migration,
- Metro - nonmetro migration,
- Movement of industry,
- Growth of the sunbelt,
- Migration of racial groups, particularly Blacks, whites and Hispanics,
- Distribution of population among the poor, the working class and the middle class.

A. Implications of Internal Migration for Elementary and Secondary School

1. Large central cities are becoming increasingly the centers of Black and other minority group populations. That is associated with white and more importantly middle-class dissatisfaction, the origins to which are only poorly understood. In any case

in the face of increasing dissatisfaction, there are only a small number of options open to the middle class:

- change of residence,
- withdrawal of pupil to either
  - private school or
  - parochial school,
- early graduation and entry into college which incidentally may stimulate certification processes to establish competence,
- tracking.

The sum of all of these processes is resegregation.

This partitioning of populations is further exacerbated by the movement of immigrant population into the large cities as discussed earlier.

2. Stabilizing and reversing these trends may be a major educational policy need which is now relatively latent but may become increasingly pressing.
3. Migration principally between metropolitan and nonmetropolitan areas is causing substantial growth, not only in nonmetropolitan counties on the perimeter of metropolitan areas, but also in other nonmetropolitan areas. The management of these growth centers from an educational point of view may present special problems because such growth is relatively unexpected. The tax base may be inadequate, the requirements and the amenities

of the new in-migrants may be substantially at odds with those of the local people.

4. Regional income equalization which has been a trend since at least 1929 may reduce interregional educational differences in terms of cost and quality of education.
5. Boom towns particularly in energy rich regions in the West and Appalachia will almost certainly create major planning needs and major local dislocations of educational systems if those plans are not adequate.
6. The upward shift in the price of energy may influence internal migration patterns in quite complex ways including reducing the attractiveness of nonmetropolitan areas and suburban areas.
7. A decline in test score performance is associated with children of migrant families irrespective of their socio-economic status.
8. In view of the relatively higher socio-economic status of migrant families, children in new communities may be anticipated, on the average, to score higher on standard tests.

B. The Overall Pattern

The historical, long-term pattern in the United States has been toward an increasely urban population. Seventy-three percent of the nation's population now lives in metropolitan areas which comprise approximately 14 percent of the nation's land area. The rural migration toward metropolitan areas seems, at least, for the moment, if not for a longer time, to have ceased and even reversed. From 1970 to 1974, the population growth of the rural areas was 5.6 percent. This is in contrast to 4 percent for the nation as a whole and 3.4 for metropolitan areas.

The same period saw a net out migration of 1.8 million people from metropolitan to nonmetropolitan areas. The eight largest metropolitan areas experienced a net out-migration of 1.2 percent. The next smaller metropolitan areas (between one and three million population) experienced an out migration of 0.3 percent.

One-tenth of the nation's 265 standard metropolitan statistical areas are now losing population; one out of every four Americans lives in a metropolitan area in decline. In the 1970-74 interval, populations of counties adjacent to metropolitan areas experienced a 6.2 percent increase.

In the employment area, there has been a 3.8 percent decline in metropolitan employment and a 1.5 percent increase in nonmetropolitan employment. The long-term decline of the Northeast, as an industrial and commercial area, goes back at least to the Great Depression. That loss of industrial primacy has been primarily to the benefit of the South and the West.[2]

The overall pattern of movement in the interval 1970-74 may be seen in Figure 57.

C. Metropolitan/Nonmetropolitan Migration

Calvin Beale of the USDA has recently reviewed the status of nonmetropolitan population growth since 1970. He makes the following key points especially with regard to the interval April 1970-July 1974 (Table 49).[3]

- Nonmetropolitan counties increased 5.6 percent while metropolitan counties increased only 3.4 percent.

Figure 57

Percent of Population Moving To, From, and Within SMSA's by Age: 1970-75[4]

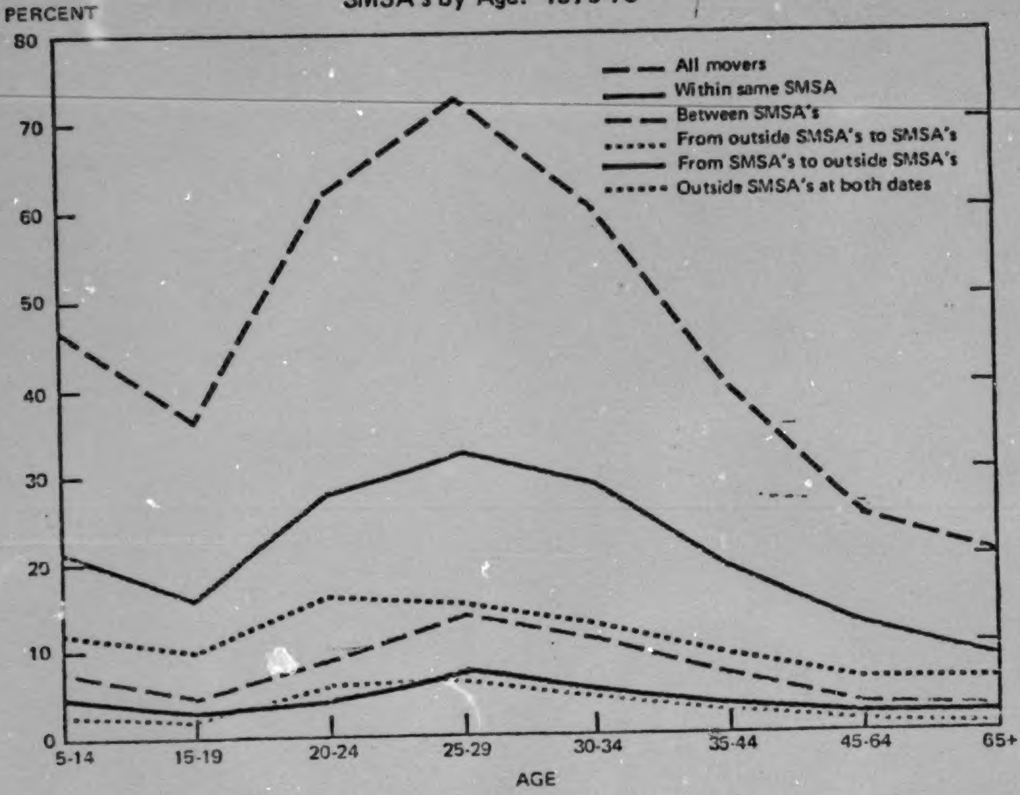


Table 49

Population Change by Metropolitan Status and Selected County Characteristics 5

Item	Number of counties	Population					Net migration			
		Number			Percentage change		1970-74		1960-70	
		1974	1970	1960	1970-74	1960-70	Number	Rate 1/	Number	Rate 1/
	No.	Thou.	Thou.	Thou.	Pct.	Pct.	Thou.	Pct.	Thou.	Pct.
Total United States	3,097	211,392	203,212	179,323	4.0	13.3	2,076	1.0	3,001	1.7
Metropolitan status: 2/										
Metropolitan counties	628	153,930	148,809	127,191	3.4	17.0	461	.3	5,959	4.7
Nonmetropolitan counties	2,469	57,463	54,404	52,132	5.6	4.4	1,614	3.0	-2,958	-5.7
Adjacent counties 3/	969	29,780	28,022	26,116	6.3	7.3	1,010	3.6	-705	-2.7
Nonadjacent counties	1,500	27,683	26,382	26,016	4.9	1.4	604	2.3	-2,253	-8.7
Entirely rural counties	623	4,618	4,353	4,548	6.1	-4.3	190	4.4	-553	-12.2
Characteristics of nonmetro counties in 1970:										
Counties with 10 percent or more net inmigration at retirement ages 4/	360	8,653	7,554	6,340	14.5	19.2	932	12.3	624	9.8
Counties with a senior State college	187	9,031	8,434	7,463	7.1	13.0	323	3.8	91	1.2
Counties with 30 percent or more employed in manufacturing	638	20,143	19,257	18,193	4.6	5.9	356	1.8	-746	-4.1
Counties with 30 percent or more employed in agriculture	331	2,062	2,057	2,305	.2	-10.7	-17	-.8	-412	-17.9
Population density per square mile in nonadjacent counties										
150 and over	15	1,176	1,124	1,020	4.6	10.2	17	1.5	-10	-1.0
100 to 149	35	1,929	1,842	1,699	4.8	8.4	18	1.0	-73	-4.3
75 to 99	61	2,781	2,674	2,568	4.0	4.1	20	.7	-170	-6.6
50 to 74	127	4,298	4,099	3,990	4.9	2.7	84	2.1	-313	-7.8
25 to 49	351	7,764	7,412	7,270	4.8	1.9	176	2.4	-541	-7.4
10 to 24	405	5,681	5,412	5,562	5.0	-2.7	177	3.3	-584	-10.5
Less than 10	506	4,054	3,820	3,907	6.1	-2.2	111	2.9	-561	-14.4

1/ Net migration expressed as a percentage of the population at beginning of period indicated. 2/ Metropolitan status as of 1974. 3/ Counties adjacent to Standard Metropolitan Statistical Areas of 1974. 4/ Counties with specified 1960-70 net inmigration rate for white persons 60 years old and over, 1970. Source: U.S. Census of Population: 1970 and Current Population Reports. U.S. Bureau of the Census.

- A net 1.6 million people moved into nonmetropolitan counties. This contrast with the net out-migration of 3 million in the 1960's from the same counties.
- All but two states--Rhode Island and Connecticut--show net retention or greater acquisition of population in nonmetropolitan areas in the 1970's.
- There is a phenomenon of adjacent counties to metropolitan areas undergoing growth. More than half of the total nonmetropolitan population is in these counties and their population increased by 6.2 percent.
- The growth rate of nonadjacent counties was also high, 4.9 percent.
- The nonmetropolitan counties that showed a most rapid growth were those that can be termed retirement counties. The 360 nonmetropolitan retirement counties' total population grew by 14.5 percent with net in migration of 932,000 people.
- The second most rapidly growing class of nonmetropolitan counties are those where senior state colleges are located. These counties include 9 million people and are basically exclusive of the retirement counties. They grew by 7.1 percent.

  Like the retirement counties, they had already been experiencing gains in the 1960's.
- In the 1960's one of the main economic trend was the decentralization of manufacturers, perhaps largely driven by the utilization of the underemployed nonmetropolitan labor force.

lower wage rates, better work attitudes, less unionization, availability of cheap land, improved transportation, and flight from urban problems.

Those counties with high dependence on manufacturing (30 percent or more of the jobs in 1970) had a 4.6% population increase in 1970-74. This has declined from 1967 when the growth in this area was 5.9%.

If one divides metropolitan areas between those with a population less than 750,000 and those with more, movement into metropolitan areas was confined to the smaller ones. Above this threshold the movement into metropolitan areas typically is reduced or negative. Small and medium size metropolitan areas are showing the same kinds of increases as non-metropolitan areas.

- The factors underlying these shifts seem to be:
  - closing the income gap
  - the absence of much further displacement from farming
  - the revival of mining
  - continued retirement to recreational, climatically favored areas
  - the downscaling of the residential aspects of the environmental ecological movement
  - certain anti-materialistic elements in the youth revolution
  - the unfavorable image of the city
  - the near elimination of former rural/urban gaps in material conveniences, such as water supply, plumbing, heating, electricity, roads, communication

  - high cost of metropolitan housing
  - emergence of an adequate system of post high school education in nonmetropolitan areas

- There seem to be some potential problems on the horizon with regard to further nonmetropolitan development, including high costs of gasoline. Rural folks travel more by car. This could inhibit immigration of families, especially young, child-bearing families. That in turn could reduce the growth of nonmetropolitan areas. Furthermore, the dropping of the birth rate may reduce the appeal of smaller communities for parents who are concerned for the welfare of their school-age children. The smaller school systems may offer less and therefore be less appealing.

D. The Distribution of Industry and Employment

Ledebur, in a study of the dynamics of change points out that during the 1960's, the nation had an average growth in manufacturing employment of 19.4 percent.[6] The Northeast increased only 11.8 percent, while the South and West grew 30 percent and 26 percent respectively. These latter two regions in the same decade grew in all industrial categories at a greater rate than in the North and at a greater rate than in the Northeast and North Central regions (with the exception of construction and mining in the West).

From 1970 to 1972, private sector metropolitan employment decreased 3.9 percent while rural employment increased 1.5 percent. The overall pattern of employment change is shown in Table 50 as a result of birth, death, migration and expansion and contraction of firms (not people). Ledebur points out that the overall increase in rural jobs derives from trade and service sectors since there has been a net decrease and manufacturing in both urban and rural areas. Table 51 displays the same data by major regional breakdown.

One of the long-term consequences of economic development in the South and West is the trend toward regional equalization of incomes (Figure 58 and 59). This is most sharply seen and most generally brought to public awareness in terms of the growth of the so-called "sunbelt" (Figure 60). The "sunbelt" as a growth region is more properly a broad band running through the South and the far West. Figure 61a illustrates growth of the sunbelt. This is, to some extent, due to individual migration which involves higher income people, but is perhaps more directly attributable to industrial migration and industrialization of previously less economically progressive areas. Regional income equalization trends may effectively undercut any major policy concerns over regional disparities of funds available per child, on a state basis. The grossest implication for public policy is that any measures directed at equalization might best be perceived as short term rather than permanent programs and, hence, as subjects for marginal rather than central Federal initiatives.

The interregional equalization that might be anticipated from growing convergence of income is not yet clearly manifest in the available data on school costs. Table 52 shows the changes in school expenditures per pupil between 1969-70 and 1970-74. The Southeast has the lowest increased expenditures. The actual expenditures for 1973-74 per pupil are shown in Table 53.

TABLE 50

Average Components of Employment Change for Metropolitan and Rural Areas by Region, 1970-72 (in percent)[7]

Metropolitan

	NET CHANGE	BIRTHS	DEATHS	EXPANSION	CONTRACTION	INMIG.	OUTMIG.
Northeast	-6.6	4.5	-12.1	10.9	-9.9	0.2	-0.3
North Central	-4.3	4.5	-10.2	10.6	-9.3	0.2	-0.2
South	-0.0	7.8	-11.6	13.6	-9.9	0.3	-0.2
West	-3.5	6.7	-13.9	14.2	-10.7	0.3	-0.2

Rural

	CHANGE	BIRTHS	DEATHS	EXPANSION	CONTRACTION	INMIG.	OUTMIG.
Northeast	-2.3	5.4	-13.2	13.6	-8.2	0.3	-0.2
North Central	1.4	6.6	-12.7	15.9	-8.5	0.3	-0.2
South	1.2	7.4	13.9	15.6	-8.0	0.4	-0.2
West	7.7	10.4	-14.8	21.6	-9.6	0.3	-0.2

TABLE 51

Average Components of Employment Change for Metropolitan and Rural Areas by Industry, 1970-72 [8] (in percents)

Agriculture

	NET CHANGE	BIRTHS	DEATHS	EXPAND.	CONTRCT.	INMIG.	OUTMIG.
METRO	-3.6	3.8	-7.7	15.9	-16.5	1.1	-0.3
RURAL	-1.7	5.0	-10.4	18.1	-14.3	0.1	-0.1

Manufacturing

	NET CHANGE	BIRTHS	DEATHS	EXPAND.	CONTRCT.	INMIG.	OUTMIG.
METRO	-10.0	3.0	-11.8	9.1	-10.2	0.2	-0.2
RURAL	- 5.5	3.5	-12.3	11.3	-8.1	0.4	-0.2

Other Industry

	NET CHANGE	BIRTHS	DEATHS	EXPAND.	CONTRCT.	INMIG.	OUTMIG.
METRO	-2.7	6.3	-11.3	15.0	-12.7	0.2	-0.2
RURAL	0.2	6.9	-13.7	18.3	-11.4	0.5	-0.4

Trade

	NET CHANGE	BIRTHS	DEATHS	EXPAND.	CONTRCT.	INMIG.	OUTMIG.
METRO	2.7	10.9	-15.3	15.1	-7.9	0.2	-0.2
RURAL	14.0	14.3	-16.7	22.8	-6.4	0.2	-0.2

Service

	NET CHANGE	BIRTHS	DEATHS	EXPAND.	CONTRCT.	INMIG.	OUTMIG.
METRO	1.6	4.7	-7.1	12.6	-8.7	0.3	-0.3
RURAL	8.3	9.2	-11.2	20.9	-10.7	0.2	-0.1

Total

	NET CHANGE	BIRTHS	DEATHS	EXPAND.	CONTRCT.	INMIG.	OUTMIG.
METRO	-3.9	5.6	-11.7	12.0	-9.8	0.2	-0.2
RURAL	1.5	7.3	-13.6	16.1	-8.4	0.3	-0.2

FIGURE 58

CLOSING THE REGIONAL INCOME GAP
(1929-1974)[9]

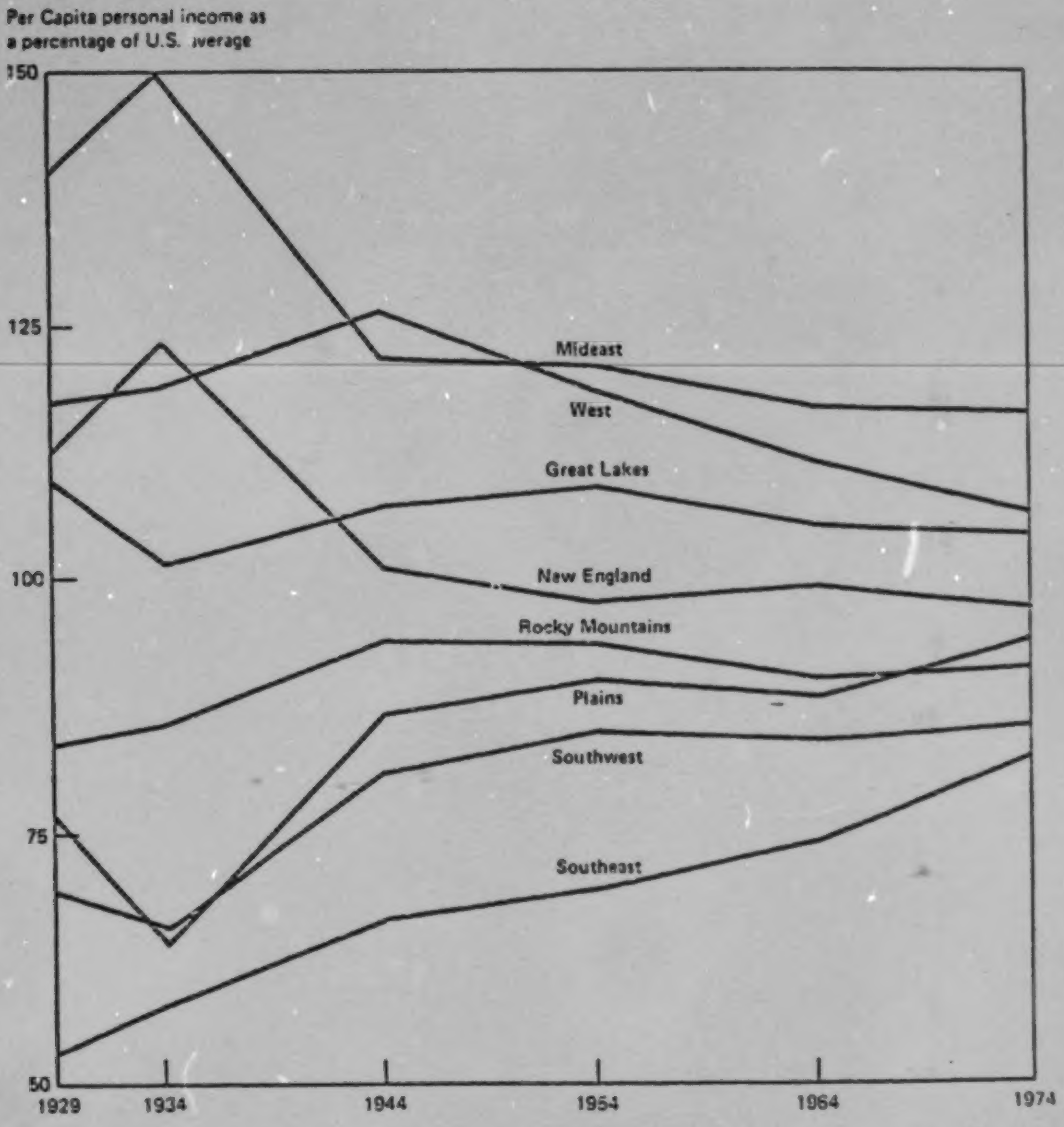


FIGURE 59

PERCENTAGE POINT CHANGE IN PER CAPITA PERSONAL INCOME AS A PERCENT OF U.S. AVERAGE
1929-1974[10]

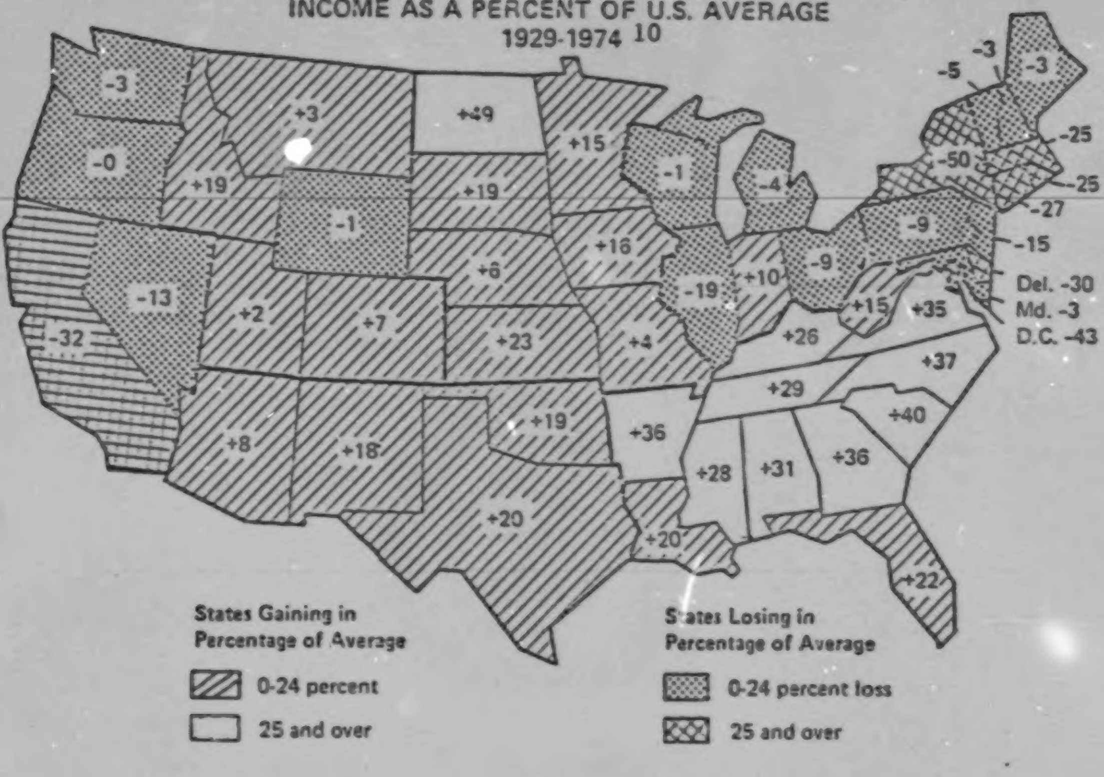

-3
-0
+3
+19
+49
+19
-1
+15
-1
-4
-13
-32
+2
+7
+6
+16
+23
-19
+10
+4
-9
-9
-3
-5
-3
-25
-50
-25
-27
-15
Del. -30
Md. -3
D.C. -43
+15
+35
+26
+37
+29
+8
+18
+19
+36
+40
+28
+31
+36
+20
+20
+22
States Gaining in Percentage of Average
0-24 percent
25 and over
States Losing in Percentage of Average
0-24 percent loss
25 and over

FIGURE 60

METROPOLITAN AREAS WITH POPULATION INCREASES OF TWELVE PERCENT OR MORE: 1970 TO 1974[11]

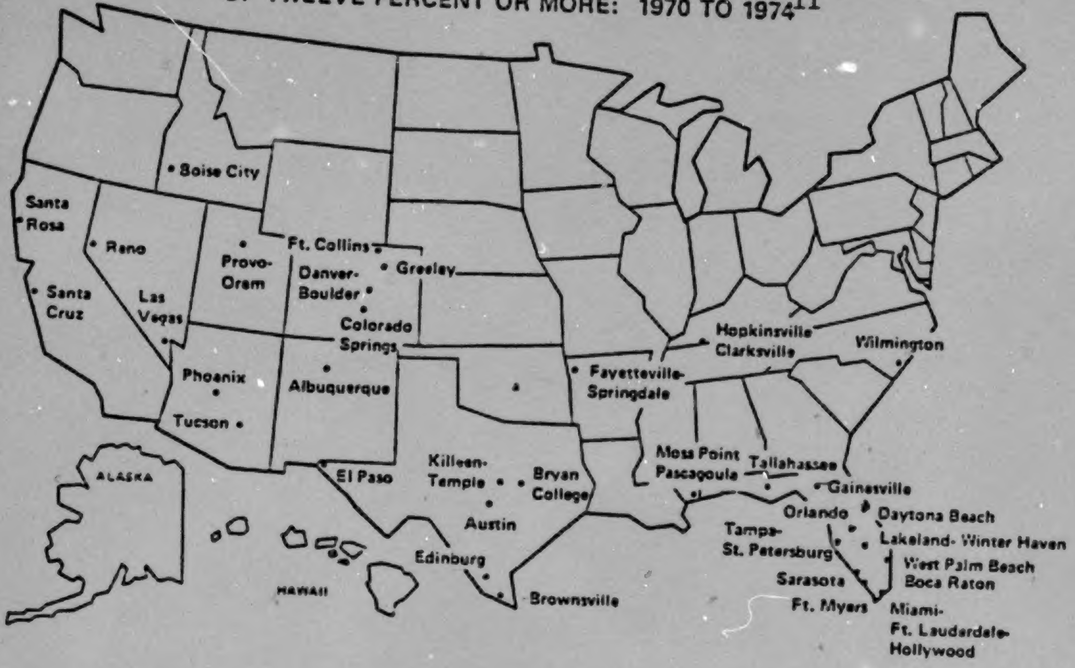

Boise City
Santa Rosa
Reno
Provo-Orem
Ft. Collins
Greeley
Denver-Boulder
Colorado Springs
Santa Cruz
Las Vegas
Phoenix
Tucson
Albuquerque
El Paso
Killeen-Temple
Bryan College
Austin
Edinburg
Brownsville
Fayetteville-Springdale
Hopkinsville Clarksville
Wilmington
Moss Point Pascagoula
Tallahassee
Gainesville
Orlando
Daytona Beach
Tampa-St. Petersburg
Lakeland-Winter Haven
Sarasota
West Palm Beach Boca Raton
Ft. Myers
Miami-Ft. Lauderdale-Hollywood
ALASKA
HAWAII

FIGURE 61a

AVERAGE ANNUAL PERCENT CHANGE IN POPULATION FOR CENSUS DIVISIONS 1960 TO 1970 AND 1970 TO 1974[12]

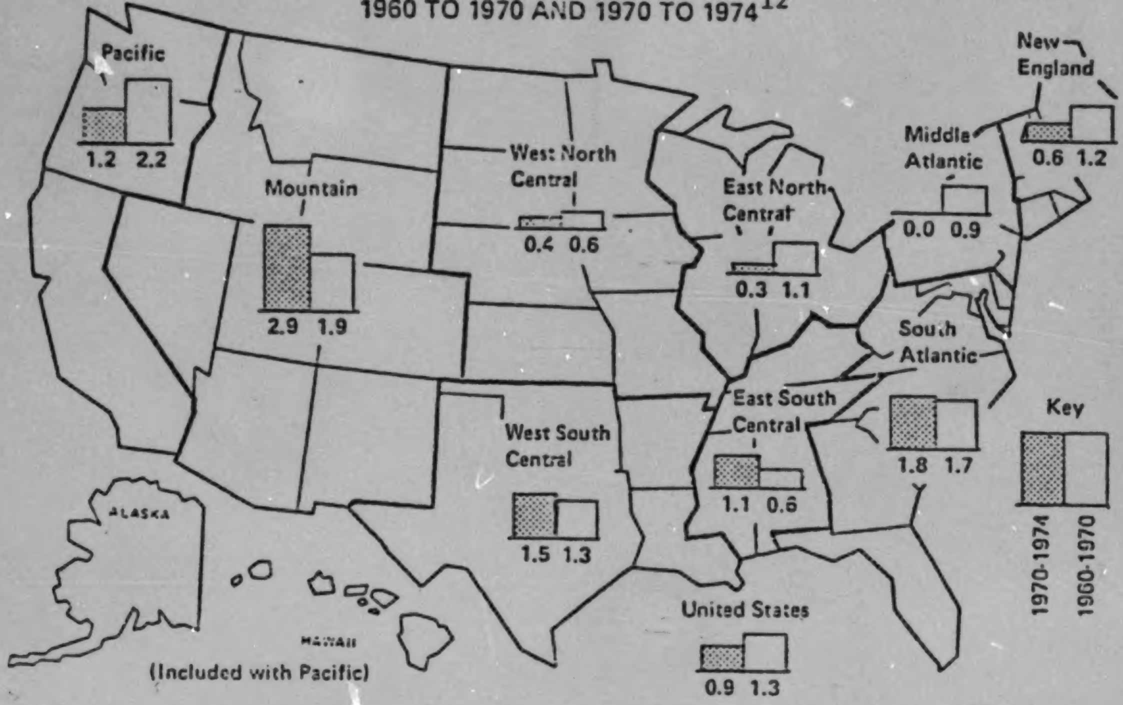

Pacific
1.2 2.2
Mountain
2.9 1.9
West North Central
0.4 0.6
East North Central
0.3 1.1
Middle Atlantic
0.0 0.9
New England
0.6 1.2
South Atlantic
1.8 1.7
East South Central
1.1 0.6
West South Central
1.5 1.3
United States
0.9 1.3
ALASKA
HAWAII
(Included with Pacific)
Key
1970-1974
1960-1970

FIGURE 61b

ESTIMATES OF THE RESIDENT POPULATION OF REGIONS: 1970 to 1975
(Numbers in thousands)[13]

REGION	July 1, 1975 (provisional)	April 1, 1970 (Census)	CHANGE 1970 to 1975 Number	Percent
UNITED STATES	213,121	207,304	9,817	4.8
Northeast	49,461	49,061	401	0.8
North Central	57,669	56,593	1,076	1.9
South	68,113	62,812	5,301	8.4
West	37,878	34,838	3,039	8.7

TABLE 52

Changes in Expenditure Estimates [14]

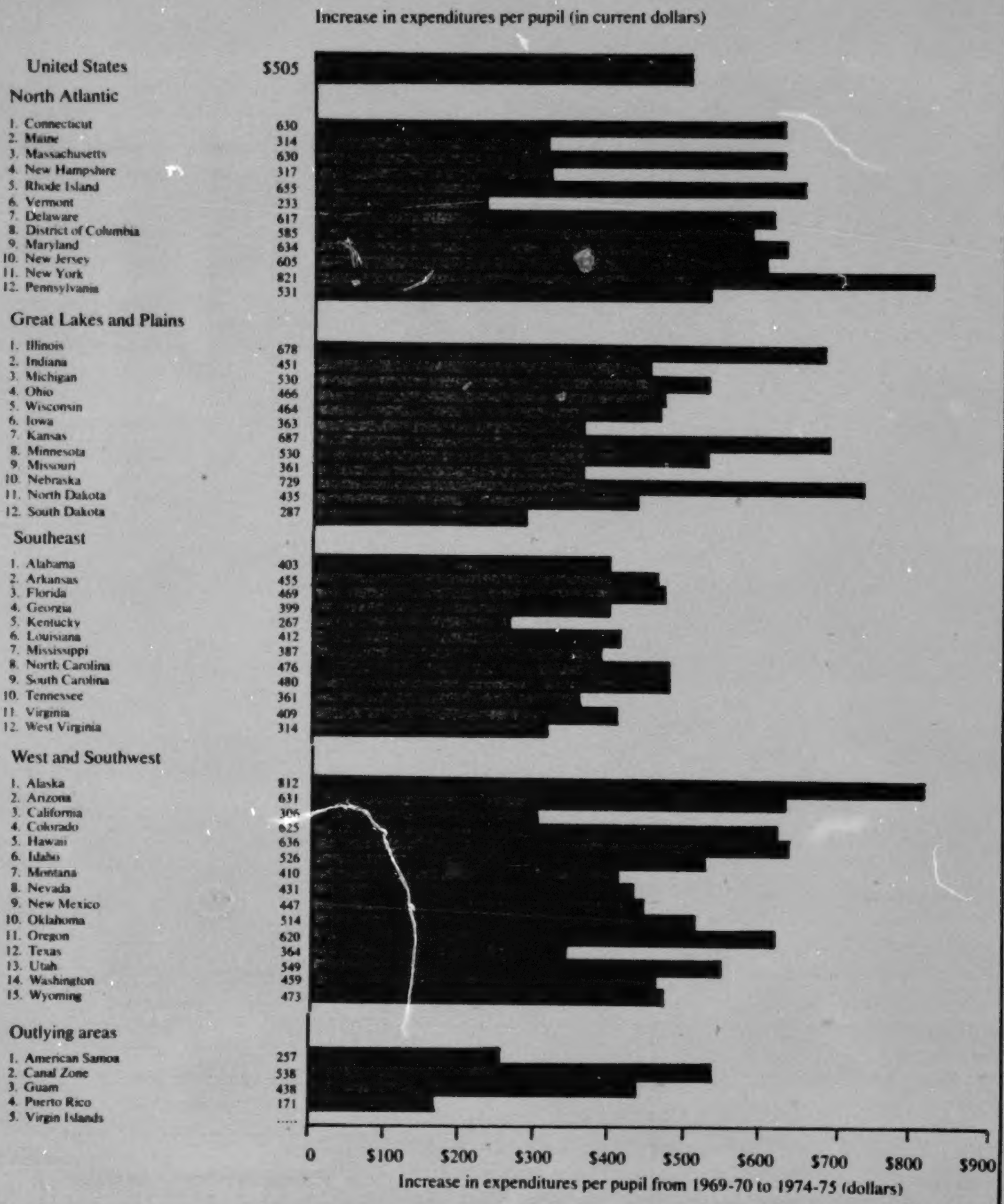


TABLE 53

Distribution of School Systems, by Current Expenditures[15]

State	Total operating systems	Percent distribution of expenditures per pupil							Median expenditure per pupil
		Total	less than $700	$700 to $899	$900 to $1,099	$1,100 to $1,299	$1,300 to $1,499	$1,500 or more	
U.S. total	**16,338**	**100.00**	**12.05**	**22.60**	**27.43**	**18.79**	**9.89**	**9.22**	**$1,008**
Alabama	126	100.00	62.16	35.86	0	1.98	0	0	669
Alaska	32	100.00	0	0	0	0	0	100.00	2,263
Arizona	276	100.00	9.51	37.49	27.24	2.70	19.82	3.24	912
Arkansas	383	100.00	43.14	33.80	18.76	4.30	0	0	739
California	1,045	100.00	8.11	18.79	24.32	19.79	18.95	10.03	1,094
Colorado	181	100.00	0	[illegible]	20.05	25.62	11.14	27.60	1,236
Connecticut	165	100.00	1.31	[illegible]	33.79	33.03	11.88	14.97	1,143
Delaware	24	100.00	0	3.85	46.15	34.61	3.85	11.55	1,112
District of Columbia	1	100.00	0	0	0	0	100.00	0	1,482
Florida	67	100.00	0	16.85	54.71	19.35	9.09	0	991
Georgia	188	100.00	39.59	37.34	19.62	2.07	0	1.38	761
Hawaii	1	100.00	0	0	0	0	100.00	0	1,302
Idaho	115	100.00	8.19	53.99	21.77	4.06	0	11.99	831
Illinois	1,057	100.00	2.73	14.83	25.51	30.78	18.46	7.71	1,128
Indiana	304	100.00	5.77	58.24	30.81	4.83	0.34	0	837
Iowa	451	100.00	0	2.18	44.67	48.86	4.29	0	1,106
Kansas	309	100.00	0.29	9.63	30.59	27.37	15.55	16.58	1,165
Kentucky	188	100.00	24.25	51.13	23.25	1.36	0	0	755
Louisiana	66	100.00	0	35.21	60.38	4.40	0	0	938
Maine	230	100.00	9.61	42.25	26.88	6.70	12.56	1.98	891
Maryland	24	100.00	0	0	54.55	40.91	0	[illegible]	1,077
Massachusetts	356	100.00	0.28	0.96	26.84	33.70	26.76	[illegible]	1,234
Michigan	593	100.00	8.15	22.04	40.78	17.11	[illegible]	[illegible]	1,005
Minnesota	438	100.00	0	1.01	33.08	48.14	16.81	0.96	1,150
Mississippi	150	100.00	53.62	45.03	1.35	0	0	0	694
Missouri	576	100.00	12.28	18.62	45.70	20.64	1.95	0.82	990
Montana	650	100.00	34.61	19.19	8.47	30.35	0.94	6.44	869
Nebraska	1,281	100.00	30.56	13.06	26.23	10.17	2.58	17.40	958
Nevada	17	100.00	0	0	32.53	39.03	28.44	0	1,153
New Hampshire	156	100.00	11.07	57.35	23.92	6.86	0.79	0	818
New Jersey	579	100.00	6.41	4.98	14.48	24.35	28.37	21.42	1,290
New Mexico	88	100.00	0.50	35.48	25.62	36.71	1.18	0.50	974
New York	734	100.00	2.02	0.90	0.14	10.26	33.10	53.57	1,515
North Carolina	150	100.00	1.36	39.81	53.45	5.39	0	0	924
North Dakota	336	100.00	3.81	33.56	32.09	14.29	8.13	8.10	976
Ohio	621	100.00	15.36	59.70	18.33	4.05	1.91	0.64	818
Oklahoma	637	100.00	32.56	32.01	21.29	1.64	0.65	11.86	765
Oregon	338	100.00	0	3.22	51.13	20.34	19.20	6.11	1,054
Pennsylvania	504	100.00	0.94	4.18	54.09	32.00	5.61	3.18	1,075
Rhode Island	40	100.00	0	0	16.37	64.93	14.03	4.68	1,237
South Carolina	93	100.00	43.14	53.06	3.79	0	0	0	721
South Dakota	220	100.00	3.61	33.66	37.05	16.16	5.21	4.31	960
Tennessee	146	100.00	60.51	29.41	9.24	.84	0	0	663
Texas	1,120	100.00	17.66	46.08	15.45	9.24	8.80	2.78	854
Utah	40	100.00	0	31.53	39.03	2.43	27.01	0	1,000
Vermont	245	100.00	12.58	31.32	32.35	13.28	4.80	5.68	922
Virginia	134	100.00	.80	43.68	48.27	4.02	0.80	2.41	907
Washington	314	100.00	0	7.19	50.61	37.45	0.96	3.79	1,085
West Virginia	55	100.00	0	52.33	47.67	0	0	0	895
Wisconsin	434	100.00	0.51	7.73	35.81	43.92	8.29	3.72	1,130
Wyoming	60	100.00	0	1.48	13.33	35.22	11.85	38.13	1,291

E. Boom Towns

While it is not clear at this point where and to what extent new energy and material reserves will be open to major exploitation, almost certainly this will occur on a large scale in the next two decades. Consequently, there is little doubt that there will be boom towns in many places. Boom will place enormous stresses on the local and even state infrastructure, particularly in the sparsely populated Western states and possibly in the coal regions of the East. Special attention should accompany the educational planning of these areas, taking into account the needs, the resources, the culture, the lifestyle of the indigenous people, as well as the needs of potentially discordant attitudes and cultural backgrounds of the new comers. The boom town creates important but specialized and highly localized problems. Virtually nothing has been done in the educational aspect of this problem. With regard to fossil energy resources alone, the candidate areas where boom towns may occur include:

- Kentucky
- Southern Illinois
- Colorado
- Wyoming
- Montana
- North Dakota

The boom town phenomenon may be of a more classical form in the Western states where the local infrastructure is small and fragile, in the states which are relatively sparsely populated. On the other hand, even in the established communities of Kentucky and Illinois an expansion in coal exploitation could stress the much more elaborate existing infrastructure to a substantial degree.

F. Urban/Suburban Partitioning

The migration into and out of cities, particularly between cities and suburbs, should be a major public policy concern since the patterns of migrations around large cities is largely one of white middle-class out-migration leaving poor, largely Black and Hispanic-American populations behind. Table 54 shows the racial distribution in major standard metropolitan statistical areas since 1900. Figure 62 shows the net migration for eight major metropolitan areas between 1960 and 1974.

The implications of these trends are several-fold.

First is the shift in available tax-base within the large metropolitan cities to cope with the relatively greater demands for educational service by the poor.

There has been a major dollar drain, between the years 1970-74, from the major cities of the United States--a net loss of $29.6 billion in aggregate income from out-migration. Immigrants in cities had a net income of 25.7 billion; emigrants from cities had a net income of 55.3 billion (Table 55).

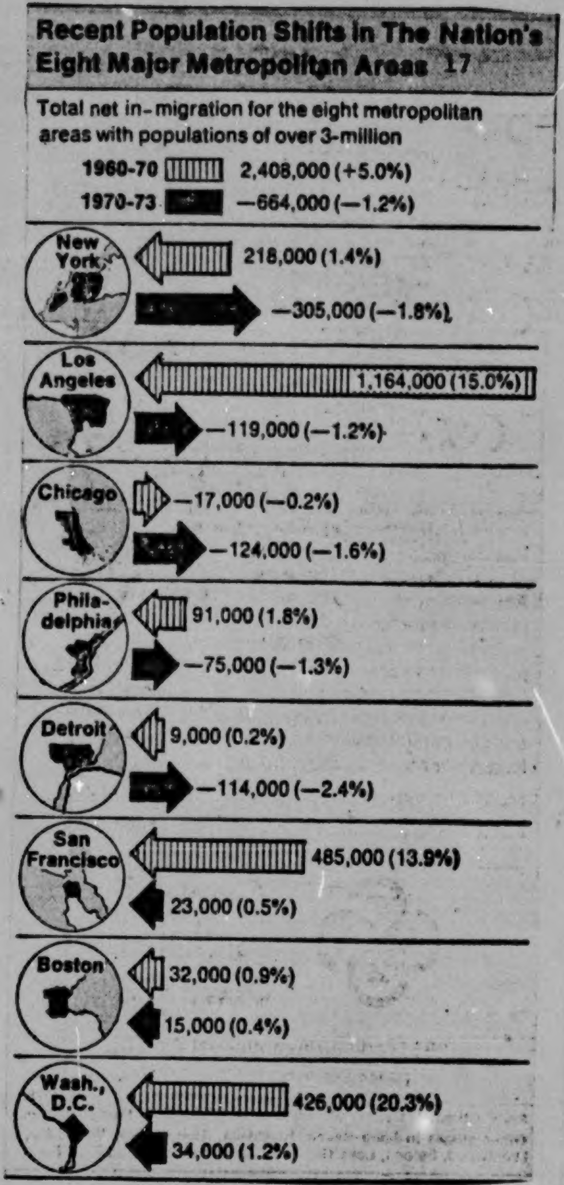
The long-term significance of this flow and whether it is in fact a long-term flow merits close and careful attention, but it certainly sheds a bright beam of light on the fiscal crises in large cities and hence on the derivative limitations in discretionary funds for education.

TABLE 54

Distribution of the Metropolitan Population by Residence in and Outside Central Cities, by Race, 1900-74[16]

Year	Combined			White			Black		
	Total	Central City	Outside	Total	Central City	Outside	Total	Central City	Outside
SMSA as of 1960 (1960 areas)*									
1900	100.0	62.2	37.8	100.0	62.8	37.2	100.0	54.5	45.5
1910	100.0	64.6	35.4	100.0	64.9	35.1	100.0	60.4	39.6
1920	100.0	66.0	34.0	100.0	65.9	34.1	100.0	67.2	32.8
1930	100.0	64.6	35.4	100.0	63.9	36.1	100.0	72.8	27.2
1940	100.0	62.7	37.3	100.0	61.6	38.4	100.0	74.6	25.4
1950	100.0	58.7	41.3	100.0	56.6	43.4	100.0	77.2	22.8
1960	100.0	51.4	48.6	100.0	47.8	52.2	100.0	79.6	20.4
1970	100.0	47.2	52.8	100.0	42.3	57.7	100.0	79.9	20.1
SMSAs as of 1970									
1970	100.0	45.9	54.1	100.0	41.1	58.9	100.0	79.0	21.0
1974	100.0	43.4	56.6	100.0	38.1	61.9	100.0	77.5	22.5

FIGURE 62



Recent Population Shifts In The Nation's Eight Major Metropolitan Areas 17

Total net in-migration for the eight metropolitan areas with populations of over 3-million

1960-70 ▥ 2,408,000 (+5.0%)

1970-73 ■ —664,000 (—1.2%)

TABLE 55

INCOME IN 1973 OF FAMILIES AND UNRELATED INDIVIDUALS 14 YEARS OLD AND OVER WHO MIGRATED TO AND FROM CENTRAL CITIES BETWEEN 1970 AND 1974

Subject	Living in cities in 1970	Moved out of cities between 1970 and 1974	Moved to cities between 1970 and 1974	Net change between 1970 and 1974
Families (thousands)	16,823	3,363	1,563	-1,800
Mean income (dollars)	$13,349	$14,169	$12,864	-$1,305
Aggregate income (billion dollars)	$224.6	$47.7	$20.1	-$27.6
Unrelated individuals (thousands)	6,975	1,066	926	-140
Mean income (dollars)	$6,134	$7,099	$6,092	-$1,007
Aggregate income (billion dollars)	$42.8	$7.6	$5.6	-$2.0

Secondly, the movement of the relatively wealthy to the suburbs and the attention to their immediate educational needs may engender reluctance to have their state funds allocated to educating children in other communities. Long-term effects of this may be seen within the cities in terms of a degenerative cycle. As the quality of the public schools declines, either an out-migration to the suburbs will occur or the resident middle-class will send their children to private schools. The net overall effect may be the death of a major social institution, namely, the public school system. The question facing the nation is whether we can sustain two school systems--one private (or public suburban), supported by a white prosperous middle class, and the other urban public catering to a poor underclass? More details on public and private school are given in Sections IX and X.

Long has presented data on the migration patterns in and around eleven major cities. His data, Tables 56-58, show that the principal factors in this migration are the shifting of whites and, to a substantially smaller extent, the immigration of Blacks or the higher birth rates among Blacks. Out-migrations of whites is the dominant factor in the increasing percent of Blacks in big cities.

The general trend of white out-migration and a stable minority population is borne out in a study in Racine, Wisconsin. A sample of the Mexican-American, Black and Anglo populations were studied in 1960 with regard to the question of minority migrants and the urban community. Ten years later the study team was able to resurvey the location of a portion of their original sample. In general they found that within the five major residential classes in Racine, Mexican-Americans had left areas that contained Mexican-Americans and Blacks and moved into other areas already containing persons of both groups. Blacks moved from very heavily populated Black areas to other areas already containing sizeable percentages of Black, but Anglos, in contrast, moved out of areas that contain sizeable Black, and Mexican-American populated areas into areas that were predominately Anglo.

Table 59 shows that when the whites moved out of Racine they tended to move at a higher percentage than Mexican-Americans or Blacks into suburban Racine or other parts of the United States. Blacks tended to remain in the city, and the Mexican-American behavior was intermediate.

An out-migration of whites in the 25 to 34 age category and the 5 to 14 age category and an in-migration of young adults can be seen in Figure 57.

The attractiveness of the city for career entry and its excitement as a place to go, appears to hold for whites until the first child is born. The demographic differences and the potential out-migration to rural nonmetropolitan areas is less clear in its implications for education and does merit some study. Calvin Beale has pointed out a possible trend reversal, namely, that with smaller numbers of children in the population, a current trend toward nonmetropolitan migration may decline since a good environment for school age children is a major factor in the emigration of young couples from the city.[19]

Long's work makes it rather clear that the education levels of migrants is higher than average.[20] A tendency to migrate long-distance for jobs is more common among the educated than among the less educated. Also shown in his data, supporting a common but hitherto unsustained opinion, is the fact that moving tends to interfere with a child's school performance. In general, children of all economic groups suffer from migration. Since

TABLE 56

RISES IN THE PERCENT OF POPULATION OTHER THAN WHITE AND COMPONENTS OF THE RISE, 11 CITIES: 1950–60 AND 1960–70[21]

	New York City	Philadelphia	Baltimore	Washington, D.C.	St. Louis	New Orleans	Detroit	Chicago	Cleveland	Atlanta	Los Angeles
Percent other than white:											
1950	9.8	18.3	23.8	35.4	18.0	32.0	16.4	14.1	16.4	36.6	10.8
1960	14.7	26.7	35.0	54.8	28.8	37.4	29.2	23.6	28.9	38.3	16.8
1970	22.8	34.1	46.9	72.1	41.3	45.4	44.5	34.4	39.0	51.6	22.8
Percent of 1950–60 rise in percent other than white due to:											
(1) Higher rate of natural increase among races other than white	30.2	28.3	27.8	21.3	21.4	53.7	19.2	27.8	20.3	[a]	32.3
(2) Immigration of races other than white	35.4	24.9	22.7	17.2	15.2	2.6	25.1	32.9	32.1	[a]	67.7[b]
(3) Outmigration of whites	34.4	46.8	49.5	61.5	63.4	43.7	55.7	39.3	47.6	[a]	
Percent of 1960–70 rise in percent other than white due to:											
(1) Higher rate of natural increase among races other than white	27.5	30.0	35.4	27.4	26.9	37.4	18.0	29.8	18.8	19.5	37.1
(2) Immigration of races other than white	44.3	13.7	14.4	9.1	73.1[c]	62.6[c]	22.8	19.0	81.2[c]	25.1	56.5
(3) Outmigration of whites	28.1	56.3	50.2	63.5			59.1	51.1		55.3	6.4

Sources: Data from Bowles and Tarver [1965], U. S. Bureau of the Census [1971], and estimates prepared by the author.

[a] Extensive annexations during the 1950–60 decade prohibit accurate estimation of natural increase and net migration.

[b] Percent of rise due to higher rate of immigration of races other than white.

[c] Percent of rise due to higher rate of outmigration of whites.

TABLE 57

RATE OF POPULATION CHANGE DUE TO NATURAL INCREASE AND NET MIGRATION, FOR 11 CITIES: 1950–60 AND 1960–70 [22]

	New York City	Phila-delphia	Balti-more	Washing-ton, D.C.	St. Louis	New Orleans	Detroit	Chicago	Cleve-land	Atlanta	Los Angeles
Rate of population change due to natural increase											
White											
1950–60	0.073	0.072	0.057	0.076	0.093	0.121	0.116	0.089	0.114	[a]	0.106
1960–70	0.051	0.038	0.036	0.005	0.025	0.056	0.036	0.052	0.067	0.074	0.078
Other races											
1950–60	0.253	0.248	0.281	0.284	0.268	0.278	0.323	0.334	0.328	[a]	0.337
1960–70	0.244	0.182	0.209	0.219	0.201	0.198	0.180	0.249	0.167	0.197	0.253
Rate of population change due to migration											
White											
1950–60	−0.140	−0.205	−0.244	−0.409	−0.332	−0.109	−0.350	−0.215	−0.299	[a]	0.070
1960–70	−0.133	−0.163	−0.249	−0.392	−0.340	−0.231	−0.327	−0.238	−0.331	−0.274	−0.023
Other races											
1950–60	0.218	0.164	0.172	0.189	0.131	0.008	0.290	0.310	0.367	[a]	0.637
1960–70	0.334	0.062	0.086	0.083	−0.012	−0.050	0.200	0.135	−0.011	0.175	0.287

Sources: See Table 1.

[a] Extensive annexations during the 1950–60 decade prohibit reliable estimation of natural increase and net migration.

TABLE 58

CHANGES IN THE PERCENT OF POPULATION OTHER THAN WHITE IN 11 SMSAS OUTSIDE THE CENTRAL CITY: 1950–60 AND 1960–70[a] 23

	New York, N.Y.	Philadelphia, Pa.–N.J.[b]	Baltimore, Md.	Washington, D.C.–Md.–Va.	St. Louis, Mo.–Ill.	New Orleans, La.	Detroit, Mich.	Chicago, Ill.	Cleveland, Ohio	Atlanta, Ga.	Los Angeles, Calif.
Percent other than white:											
1950	4.5	6.3	10.2	8.7	1.3	15.6	5.1	2.9	0.9	13.0	2.9
1960	5.0	5.7	6.9	6.5	1.2	14.3	3.8	3.1	0.8	8.6	4.7
1970	6.3	6.1	6.2	8.9	1.3	11.8	3.9	3.5	4.0	6.3	8.4
Rate of population change due to natural increase											
White											
1950–60	0.190	0.183	0.238	0.374	0.213	0.353	0.320	0.214	0.189	c	0.202
1960–70	0.102	0.137	0.160	0.387	0.132	0.229	0.168	0.144	0.105	0.213	0.122
Other races											
1950–60	0.259	0.224	0.217	0.765	0.251	0.468	0.368	0.444	0.222	c	0.480
1960–70	0.264	0.124	0.188	0.233	0.136	0.434	0.256	0.380	0.745	0.242	0.390
Rate of population change due to migration											
White											
1950–60	0.551	0.328	0.554	0.626	0.323	0.775	0.493	0.487	0.477	c	0.395
1960–70	0.144	0.260	0.232	0.613	0.231	0.270	0.118	0.202	0.123	0.510	0.018
Other races											
1950–60	0.724	0.118	−0.048	0.235	0.051	0.451	−0.034	0.400	0.395	c	1.207
1960–70	0.331	0.232	0.046	0.767	0.347	0.066	0.048	0.149	4.281	0.006	0.732

Sources: See Table 1.

[a] SMSAs are defined as of 1960.

[b] Camden Co., N.J., included with Philadelphia Co., Pa., to form central city.

[c] Extensive annexations during the 1950–60 decade prohibit reliable estimation of natural increase and net migration.

TABLE 59

RESIDENTIAL LOCATION OF 1960 SAMPLE OF MEXICAN-AMERICAN, BLACKS AND ANGLOS OF RACINE, WISCONSIN, TEN YEARS LATER (1970)[24]

	TOTAL NUMBER IN 1960 SAMPLE	NUMBER RESIDING IN RACINE IN 1970	SUBURBAN RACINE	OTHER MIDWEST LOCATION	OTHER USA LOCATION
ANGLOS	376	311	49	4	12
MEXICAN-AMERICANS	247	215	13	8	11
BLACKS	263	253	6	4	--

there is such a differentially high percent of the prosperous among migrants, one would expect new communities, on the average, to have higher scores in such things as SAT's (Table 60).

Gary Orfield of the Brookings Institute has extensively reviewed, as of 1976, the research on outmigration of whites from cities, and he concludes:[25]

> All we have now are preliminary studies, some national, some local, employing very different kinds of data and based on different analytic assumptions. Though the evidence raises important questions, it is impossible now to demonstrate that school integration, in itself, causes substantial white flight.

The number of factors influencing shifting populations are so numerous that no definitive position is justified with regard to which effect leads to which consequence, or which consequence is, in fact, a cause. Orfield identifies ten major factors influencing the distribution of white and Black, urban and suburban population:

- record levels of housing construction, overwhelmingly concentrated in the suburbs;
- major urban riots;
- rapid continued movement of urban jobs to suburban facilities;
- trend toward racial polarization in city politics and the emergence of black political leaders;
- increasing crime and public fears of violence;
- more rapid expansion of ghetto boundaries made possible by 1968 federal "fair housing" laws;
- increases in strikingly disproportionate central city taxation in some cities.

TABLE 60

Children 8 to 17 Years Old—Percent Enrolled in School and Percent Enrolled At, Above, and Below Modal Grade for Age, According to Age, Whether Living with Both Parents, and Number of States Lived in: April 1970 [26]

	Total number (000's)	Percent enrolled	Percent of Enrolled: Below mode for age	At mode for age	Above mode for age
Living with Both Parents					
Children 8 to 11 years old					
Lived in one state	10,275	98.2	14.4	69.6	16.1
Lived in two states	1,951	98.4	14.6	70.6	14.8
Lived in three or more states	372	99.0	13.2	72.7	14.1
Children 12 to 15 years old					
Lived in one state	9,887	97.5	17.3	66.3	16.4
Lived in two states	2,051	97.8	16.9	67.6	15.5
Lived in three or more states	327	98.3	15.4	70.1	14.5
Children 16 and 17 years old					
Lived in one state	3,296	92.8	18.9	69.4	11.7
Lived in two states	704	93.3	18.5	70.3	11.2
Lived in three or more states	91	94.5	16.8	72.5	10.8
Other Children in Families					
Children 8 to 11 years old					
Lived in one state	1,833	95.6	20.6	59.5	19.9
Lived in two states	370	94.8	19.6	62.8	17.6
Lived in three or more states	53	95.4	17.0	66.1	16.9
Children 12 to 15 years old					
Lived in one state	1,967	94.0	26.3	56.0	17.7
Lived in two states	448	93.5	24.3	58.7	17.0
Lived in three or more states	50	94.6	20.7	62.2	17.1
Children 16 and 17 years old					
Lived in one state	1,755	81.9	21.5	65.5	13.0
Lived in two states	393	82.3	20.8	66.7	12.5
Lived in three or more states	39	83.9	18.7	70.2	11.2

Source: 1970 Census of Population, *Lifetime and Recent Migration*, Table 6.

- decline in the actual level of central city services in some cities;
- housing subsidy programs of unprecedented magnitude which tend to accelerate racial transition in the city, create opportunities for lower income whites in suburbs, and, sometimes, end with the elimination of thousands of units from the central city housing stock;
- major financial incentives, in terms of down payment and financing, for young families to purchase new outlying suburban housing.

In addition, he points out that there are specific problems in schools:

- Many city schools have deteriorating physical plants.
- Local newspapers carry reports of steadily declining achievement tests.
- Teacher strikes have eroded confidence and sometimes produced substantial enrollment declines.
- Financial crisis is forcing rising teacher ratios.

Implicit in much of the literature as Orfield points out, is that what is interpreted to be white flight may more properly be seen as a class, rather than an ethnic, phenomenon. For example, Washington, D.C. in the period following 1972 has undergone an epidemic of "massive Black flight." Orfield argues as follows:[27]

> The situation in the Washington metropolitan area suggests possible future patterns. In the first four years of the 1970's, the Washington Black population fell by 5 percent. The city's suburbs, on the other hand, experienced an astonishing 61 percent increase in Black population in this brief period. The decline in central city Black population during this period was more than

> twice as fast as the out-migration of the city's remaining whites. Almost three-fifths of the total suburban population growth during this period came from new Black residents.
>
> More than a third of the Black children in the Washington metropolitan area attended suburban schools by 1972, and the number is steadily rising. District of Columbia public school statistics show that even among the Blacks who remain in the city, about 10,000 are using private schools. The city, in other words, is experiencing 'massive black flight,' and its public schools are becoming not simply Black institutions, but Black lower class institutions. Elementary school enrollment declined 5.4 percent in the single year between fall 1973 and fall 1974. Obviously these families are not fleeing contacts with Blacks, but are responding to both the problems of city life and the attractions of the suburbs.

The substance of the white flight research is that it is really not clear what causes the partitioning of populations. But it is likely that many of the factors most crucial in that process are outside the scope of school policy, such as problems of housing policy and crime control, and the quality of urban life.

VII. THE DEMOGRAPHY OF DECLINING ENROLLMENT[1]

America experienced a record high level of births for the 18 years from 1946 to 1964. In each of those years, births exceeded any year previous to 1946, usually by at least 25 percent. From 1954 to 1964, numbers of births exceeded 4 million each year. The maximum number born was, however, recorded in 1957. The decline, barely perceptible at first, began to accelerate in the early 1960's. The last year of 4 million plus births was 1964. There was a sharp 7 percent drop in 1965 and the decline in numbers born continued (with the exception of a small upturn in 1969 and 1970) to 1973. Since then, the level has held fairly steady at just under 3.2 million a year. This represents a decline of over 20 percent in just one decade (1964 to 1974).

School enrollments in the elementary schools (K-8) peaked in 1969, high school enrollments (9-12) are expected to peak this year. These trends in the large,imply relative over capitalization or underutilization of schools and surplus teachers. Managing this decline is a major policy concern in education at the state and local level.

Furthermore, decline is too simple a concept. Shifting school populations, local growth and local decline are more appropriate planning concepts. Making matters worse is the inadequacy of demographic analysis capabilities at the state and local level.

Some of the aggregate figures hide the thorniest policy issues; namely, the highly uneven distribution of these shifts at the regional, state, and local level.

A. The Responses to Decline

In the face of declining enrollment, there are only three general strategies available to school administrators.

1. Contract in size:
    - consolidation
    - staff cutbacks
    - cut the so-called frills, i.e., sports, music and art
2. Expand services to present clientele through:
    - after school care
    - personal development
    - curriculum expansion
    - smaller classes and more individualized attention (This could include reducing the size of individual school populations without closing.)
    - health services
3. Expand services to new clientele, such as:
    - preschool day care
    - health services, for example, immunization
    - community center functions
    - adult learning needs

- credentials
- career skills
- hobbies and recreation
- other training of economic value, such as car and home repair

There is much to say in favor of each of these options and many questions to raise about their appropriateness, in general, or in any particular context.

Several of them will be considered in turn in this and the next section which most sharply relate to demographic factors.

Under Congressional mandate, the National Institute of Education has set up a Division of School Finance and Organization specifically to explore the impacts of declining enrollments on financing organizations of elementary and secondary education.

This section presents background data of a demographic sort now available, mostly drawn from that program's activities. It does not deal with questions of finance policy.

A sense of the details and complexity of decline and shifting school populations is seen in the attached Figures 63-64, prepared by the Minnesota State Demographer for the report of the Commission on Minnesota's Future.

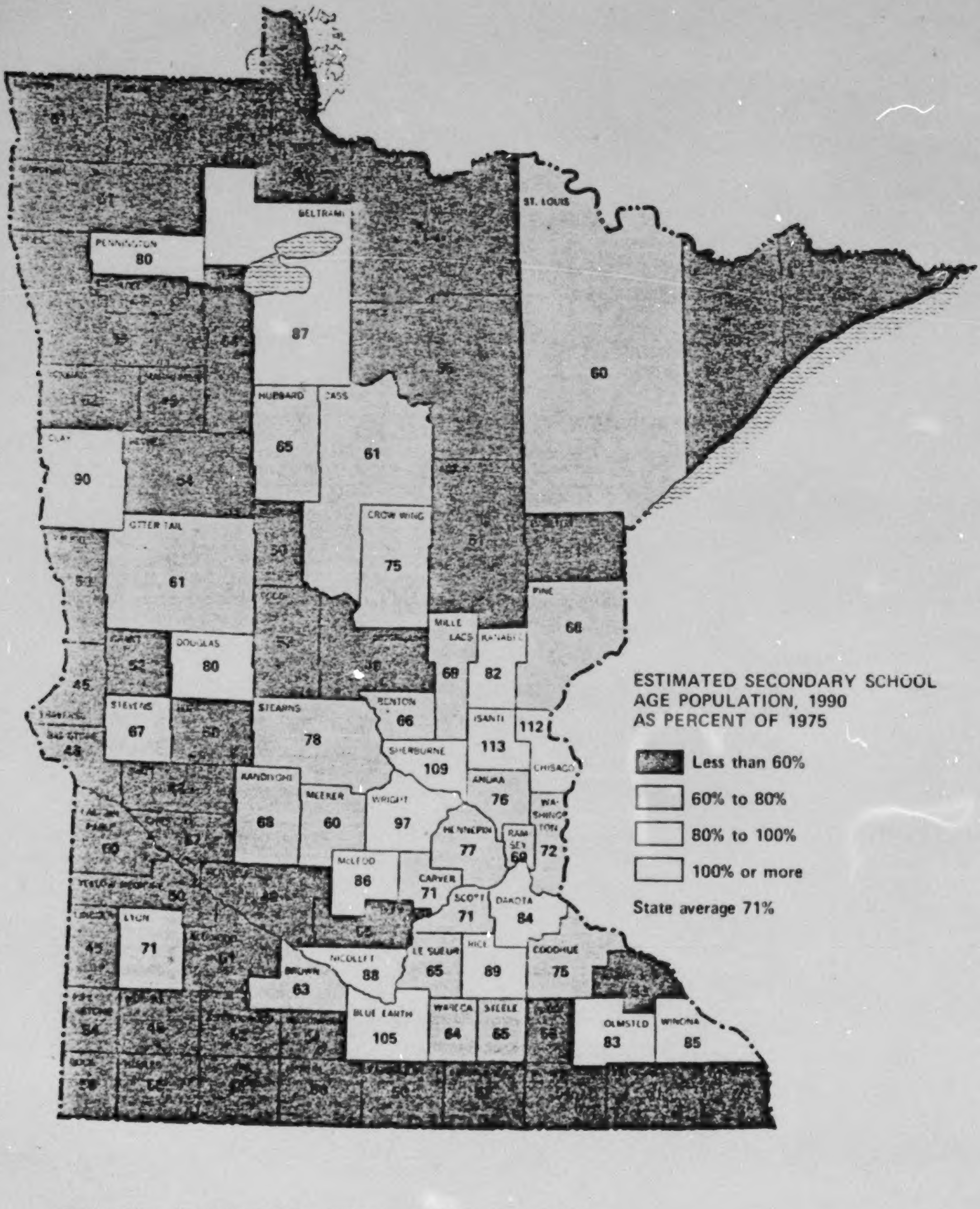
The data indicates that by 1990, the center of the Minneapolis-St. Paul area (SMSA) will have only 60 to 80 percent of the 1975 school population, but that the suburban ring will undergo a mixed pattern--decline to that same level in some counties, with growth in four counties. In the less populated rural areas of Minnesota, the pattern is quite clear, a substantial decline to 60 percent or less of the present school system.

B. Where Declining Enrollment Occurs

Approximately three-fourths of the states (37 states) have experienced enrollment declines since 1970 as indicated by Table 61. California, alone, has lost 239,000 students since 1970 and Ohio has lost 112,000. To obtain an indicator of the impact of the decline, the absolute numbers have been adjusted to a percent of 1970 enrollments. Sixteen states have lost at least four percent of their students, with Kansas losing approximately thirteen percent, and North Dakota, ten percent. Twelve states have experienced increasing enrollment during the past five years (Table 62) with Arizona (+ 9.8) and Florida (+ 8.1) leading the list.

FIGURE 63

SCHOOL AGE POPULATION, 1990 [2]


PENNINGTON
80
BELTRAMI
87
ST. LOUIS
60
HUBBARD
65
CASS
61
CLAY
90
OTTER TAIL
61
CROW WING
75
PINE
68
DOUGLAS
80
MILLE LACS
69
KANABEC
82
STEVENS
67
BENTON
66
STEARNS
78
ISANTI
113
112
SHERBURNE
109
CHISAGO
ANOKA
76
KANDIYOHI
68
MEEKER
60
WRIGHT
97
HENNEPIN
77
RAMSEY
69
WASHINGTON
72
MCLEOD
86
CARVER
71
SCOTT
71
DAKOTA
84
LYON
71
NICOLLET
88
LE SUEUR
65
RICE
89
GOODHUE
75
BROWN
63
BLUE EARTH
105
WASECA
64
STEELE
65
OLMSTED
83
WINONA
85
45
48
53
45
54
ESTIMATED SECONDARY SCHOOL AGE POPULATION, 1990 AS PERCENT OF 1975
Less than 60%
60% to 80%
80% to 100%
100% or more
State average 71%

SOURCE: MINNESOTA STATE DEMOGRAPHER

FIGURE 64[3]

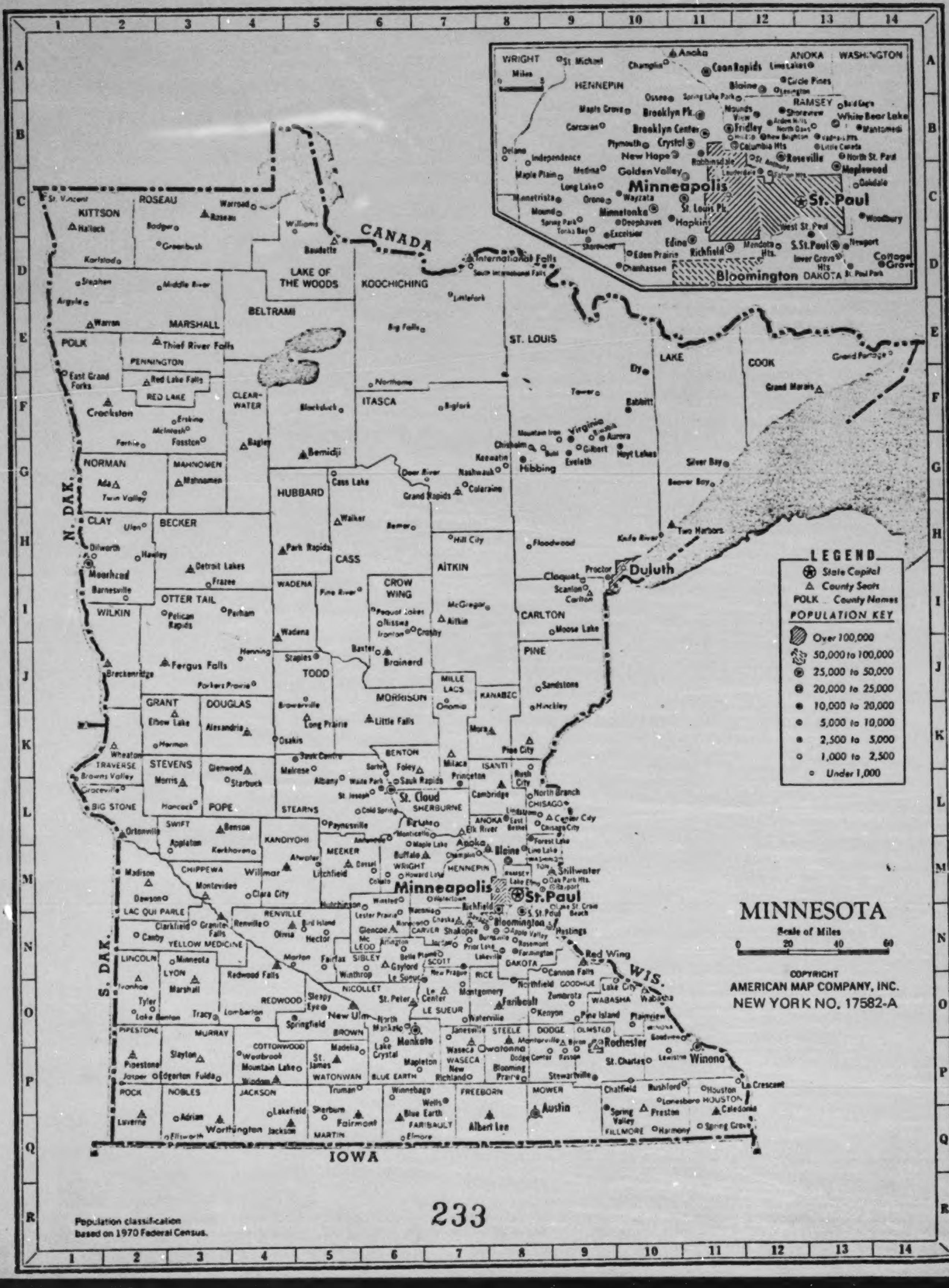

MINNESOTA
Scale of Miles
0 20 40 60
COPYRIGHT
AMERICAN MAP COMPANY, INC.
NEW YORK NO. 17582-A
LEGEND
State Capital
County Seats
POLK ... County Names
POPULATION KEY
Over 100,000
50,000 to 100,000
25,000 to 50,000
20,000 to 25,000
10,000 to 20,000
5,000 to 10,000
2,500 to 5,000
1,000 to 2,500
Under 1,000
Population classification based on 1970 Federal Census.
233
CANADA
IOWA
N. DAK.
S. DAK.
WIS.
KITTSON
ROSEAU
LAKE OF THE WOODS
KOOCHICHING
MARSHALL
BELTRAMI
POLK
PENNINGTON
RED LAKE
CLEARWATER
ITASCA
ST. LOUIS
LAKE
COOK
NORMAN
MAHNOMEN
HUBBARD
CLAY
BECKER
CASS
AITKIN
WADENA
CROW WING
CARLTON
OTTER TAIL
WILKIN
TODD
PINE
MILLE LACS
KANABEC
GRANT
DOUGLAS
MORRISON
BENTON
ISANTI
TRAVERSE
STEVENS
POPE
STEARNS
SHERBURNE
CHISAGO
BIG STONE
SWIFT
KANDIYOHI
MEEKER
ANOKA
CHIPPEWA
WRIGHT
HENNEPIN
RAMSEY
WASHINGTON
LAC QUI PARLE
RENVILLE
MC LEOD
CARVER
YELLOW MEDICINE
SIBLEY
SCOTT
DAKOTA
LINCOLN
LYON
REDWOOD
NICOLLET
LE SUEUR
RICE
GOODHUE
WABASHA
PIPESTONE
MURRAY
COTTONWOOD
BROWN
WATONWAN
BLUE EARTH
WASECA
STEELE
DODGE
OLMSTED
WINONA
ROCK
NOBLES
JACKSON
MARTIN
FARIBAULT
FREEBORN
MOWER
FILLMORE
HOUSTON
Minneapolis
St. Paul
Duluth
St. Cloud
Rochester
Bloomington
International Falls
Moorhead
Mankato
Winona
Austin
Albert Lea
Hibbing
Virginia
Brainerd
Bemidji
Fergus Falls
Willmar
New Ulm
Red Wing
Faribault
Owatonna
Worthington
Crookston
Thief River Falls
Grand Rapids
Two Harbors
Grand Marais
Stillwater
Anoka
Blaine
Coon Rapids
Brooklyn Center
Brooklyn Pk.
Fridley
Crystal
New Hope
Golden Valley
Robbinsdale
St. Louis Pk.
Minnetonka
Hopkins
Edina
Richfield
Roseville
Maplewood
White Bear Lake
S. St. Paul
Cottage Grove
Burnsville

TABLE 61

Declining Enrollments of State School Systems 1970 to 1975[4]

	In Thousands	% Decline from 1970 Enrollments
Alabama	48	6.0
Arkansas	12	2.7
California	239	5.2
Connecticut	7	1.1
Delaware	4	3.0
Georgia	27	2.5
Hawaii	6	3.3
Illinois	79	3.4
Indiana	55	4.5
Iowa	44	6.6
Kansas	66	12.9
Kentucky	22	3.1
Louisiana	9	1.1
Maryland	29	3.2
Michigan	60	2.8
Minnesota	37	4.0
Mississippi	25	4.7
Missouri	46	4.4
Montana	6	3.4
Nebraska	13	4.0
New Jersey	24	1.6
New Mexico	1	.4
New York	66	1.9
North Carolina	23	1.9
North Dakota	15	10.2
Ohio	112	4.6
Oklahoma	36	5.7
Oregon	7	1.5
Pennsylvania	97	4.1
Rhode Island	11	5.9
South Carolina	16	2.5
South Dakota	13	7.8
Tennessee	35	3.9
Texas	78	2.7
Washington	39	4.7
Wisconsin	26	2.6
Wyoming	2	2.3

TABLE 62

Increasing Enrollments of State School Systems
1970 to 1975[5]

	In Thousands	% Increase Since 1970
Alaska	6	7.5
Arizona	43	9.8
Colorado	13	2.4
Florida	116	8.1
Idaho	4	2.2
Maine	3	1.2
Massachusetts	32	2.7
Nevada	8	6.3
New Hampshire	12	7.5
Vermont	1	1.0
Virginia	5	.5
W. Virginia	1	.3

The problem of decline is most severe in states, such as New York and California, where severe fiscal constraints on state budgets may limit local resources and state aid. In other areas the property tax base is growing.

Declining enrollment may also ease constraints as suggested below in the case of Iowa by becoming the basis for substantial financial reform.

Just as enrollment shifts vary by state and geographic region, they also vary by grade level, district and type of community. Table 63 illustrates that the overall impact of declining enrollment has been most severe in the early grades while enrollment increases are still taking place in secondary grades. This phenomenon indicates that during the next decade high schools will have to adjust to decreasing numbers of students.

The distribution of enrollment changes is also far from uniform among school districts within the states, as Table 64 indicates for Michigan, Missouri, South Dakota, and Washington. Many school districts in these states have experienced student declines in excess of 20 percent, while an even greater number have experienced increases of 20 percent or more.

The amount of decline also varies with school district size and geographic location. Results of studies conducted by the Education Commission of the States (ECS) and the National Council of State Legislatures (NCSL) indicate that declining enrollments have occurred in school districts of all sizes, but have affected most severely the largest and most of the smallest districts.

TABLE 63

Percent Change in Public Elementary and Secondary School Enrollment Between Fall 1970 and Fall 1974[6]

Region and State	Percent Change in: Elementary Enrollment	Secondary Enrollment	Total Enrollment
New England	-3.7%	9.5%	1.1%
Connecticut	-4.2	10.8	-0.2
Maine	-2.1	5.8	0.1
Massachusetts	-5.9	14.5	2.6
New Hampshire	8.5	11.2	9.6
Rhode Island		-9.5	-4.8
Vermont	-3.2	-11.1	-6.5
Mideast	-7.7	4.7	-2.4
Delaware	-8.7	7.2	-1.6
Maryland	-9.1	7.4	-2.1
New Jersey	-3.8	4.2	-1.0
New York	-7.8	5.5	-1.8
Pennsylvania	-9.1	2.6	-3.7
Southeast	-0.7	4.9	1.5
Alabama	-8.0	-1.4	-4.9
Arkansas	0.8	5.6	3.0
Florida	14.5	22.8	18.2
Georgia	-4.6	3.7	-1.6
Kentucky	-3.8	1.7	-1.8
Louisiana	-0.1	0.1	0.0
Mississippi	-1.7	-6.6	-3.9
N. Carolina	-2.1	0.8	-1.2
S. Carolina	-1.9	-1.9	-1.9
Tennessee	-8.3	0.1	-3.0
Virginia	-0.8	5.0	1.4
W. Virginia	3.1	-1.1	1.2
Great Lakes	-11.5	10.9	-2.9
Illinois	-7.3	5.7	-2.6
Indiana	-9.3	3.4	-3.7
Michigan	-9.6	7.3	-1.9
Ohio	-19.2	32.3	-4.2
Wisconsin	-5.7	3.4	-2.0
Plains	-16.9	10.1	-7.2
Iowa	-29.5	49.2	-6.4
Kansas	-17.9	-5.6	-12.7
Minnesota	-10.6	4.7	-3.4
Missouri	-16.0	11.0	-9.1
Nebraska	-9.8	3.9	-3.9
N. Dakota	-14.6	2.0	-9.4
S. Dakota	-10.8	-0.6	-7.6

Continued)

Southwest	-16.7	42.9	1.9
Arizona	14.8	3.4	11.3
New Mexico	-11.8	0.9	-6.0
Oklahoma	-8.4	0.6	-4.5
Texas	-23.4	73.3	2.7
Rocky Mountains	-0.5	4.5	1.7
Colorado	-0.9	8.5	3.3
Idaho	-0.9	6.8	2.9
Montana	7.3	-15.5	-1.6
Utah	-2.8	5.1	0.8
Wyoming	-7.0	7.4	-0.4
Far West	-8.4	1.2	-4.7
Alaska	-18.6	85.6	7.4
California	-9.0	-0.6	-5.8
Hawaii	-7.4	5.5	-1.8
Nevada	-1.1	19.2	7.4
Oregon	-0.8	-0.3	-0.6
Washington	-9.3	2.6	-3.9
Total U.S.	-8.3	8.9	-1.7

TABLE 64

DISTRIBUTION OF PERCENT CHANGE IN STUDENTS BETWEEN 1970-71 AND 1974-75 IN MICHIGAN, MISSOURI, SOUTH DAKOTA AND WASHINGTON[7]

Percent Change in Students 1970-71 to 1974-75	Number of School Districts			
	Michigan	Missouri	South Dakota	Washington
Over -25 percent	12	5	7	9
-20 to -25 percent	9	4	10	9
-15 to -20 percent	18	21	24	15
-10 to -15 percent	48	42	40	24
-5 to -10 percent	63	85	52	48
0 to -5 percent	97 /24)	60	26	43
0 to 5 percent	84	97	16	46
5 to 10 percent	95	48	7	35
10 to 15 percent	59	42	3	15
15 to 20 percent	29	24	2	17
20 to 25 percent	25	10	3	13
Over 25 percent	44 / [illegible]	7		23

Source: Based on data from the State Departments of Education in Michigan, Missouri, South Dakota and Washington.

TABLE 65

AVERAGE PERCENT CHANGE IN STUDENTS BETWEEN 1970-71 AND 1974-75 AMONG MICHIGAN, MISSOURI, SOUTH DAKOTA AND WASHINGTON SCHOOL DISTRICTS BY CENTRAL CITY, SUBURB AND NONMETROPOLITAN LOCATIONS[a]

State	Location of District	Number of Districts	Percent Change in Students, 1970-71 to 1974-75			
			Average	Minimum	Maximum	Standard Deviation
Michigan	Central City	11	-5.3	-12.3	11.4	7.6
	Suburban	225	+2.9	-30.8	148.2	18.1
	Nonmetropolitan	347	+5.7	-48.5	162.5	18.6
Missouri	Central City	5	-10.1	-21.1	2.7	9.5
	Suburban	85	+5.0	-22.1	61.9	16.9
	Nonmetropolitan	365	+1.1	-34.4	116.5	12.8
South Dakota	Central City	2	-8.3	-5.8	-10.9	3.6
	Suburban	10	-1.0	-18.5	12.0	9.9
	Nonmetropolitan	180	-6.7	-37.5	235.4	21.7
Washington	Central City	4	-12.5	-18.5	-8.0	4.5
	Suburban	65	+4.6	-19.1	65.0	15.3
	Nonmetropolitan	228	+1.5	-85.9	204.6	25.9

Source: Based on data from the State Departments of Education in Michigan, Missouri, South Dakota and Washington.

What is occurring becomes clear as one examines the enrollment changes in urban, suburban and nonmetropolitan school districts. In most states, as in the four states ECS studied, the smallest school districts are located predominately in nonmetropolitan areas while the largest school districts are in metopolitan locations. Table 65 shows that the school districts with the maximum enrollment declines and the school districts with the maximum increases in students are both located in nonmetropolitan areas. The data in the table also clearly illustrate the effect of pupil decreases on central city school districts. There was pupil decline in the central cities in each of the four states.

Closely related but by no means identical data, collected in the study by the National Association of State Boards of Education at the Syracuse Research Corporation, present change in the fifty states for enrollments in grades K through 8 and K through 12. The projected changes from the fall of 1975 to the fall of 1980 were collected directly from state education agencies through a survey for the U.S. Office of Education (Table 66).

With regard to Big City Schools, the National Association of State Boards of Education concluded: 9

> Severe enrollment decline is primarily an urban problem. When state education departments were asked where they expected the greatest declines to occur in the next five years, officials in 17 of the 37 states responding indicated that the most severe decline would be in the state's largest

TABLE 66

Percentage Change In Enrollments in the Fifty States Ranked By Per Cent K-8 Decline[10]

(All percentages are negative unless otherwise noted.)

	% Change in Enrollments Between Fall 1971 and Fall 1975		*Projected Change Fall 1975 to Fall 1980*
State	*K-8*	*K-12*	*K-12*
More than 10%			
Kansas	15.40%	11.40%	1.64%
North Dakota	13.89	8.59	NR*
South Dakota	10.73	7.42	4.80
Rhode Island	10.51	7.18	4.56
8-10%			
Iowa	9.63	5.66	14.50
Delaware	9.18	4.45	15.88
Illinois	9.08	4.27	10.52
Alabama	8.87	6.11	NR
Nebraska	8.52	4.92	5.14
Pennsylvania	8.49	4.62	15.25
Ohio	8.15	5.11	10.95
Minnesota	8.04	3.27	13.04
6-8%			
Hawaii	7.90	4.71	3.50
Indiana	7.82	4.37	6.77
Missouri	7.71	2.87	NA**
Maryland	7.69	3.80	6.80
Oklahoma	7.68	5.55	NA
New Mexico	7.64	1.73	6.16
Montana	7.40	4.19	5.16
Mississippi	7.20	3.84	NA
New York	7.06	3.07	11.86
Wisconsin	6.68	3.19	5.03
Connecticut	6.58	1.77	NR
Louisiana	6.31	2.47	NA
Kentucky	6.27	3.51	+1.01
California	6.23	4.51	8.17
4-6%			
Washington	5.90	3.23	NA
Michigan	5.30	4.15	NA
New Jersey	5.17	2.65	11.66
Tennessee	5.05	3.63	NR
South Carolina	4.66	4.10	2.39
Vermont	4.46	1.27	NA
Arkansas	4.29	2.22	7.96
2-4%			
Colorado	3.70	2.66	5.84
Maine	3.69	+ .64	NA
Virginia	2.85	+ .92	6.33
Wyoming	2.79	1.65	NA
Alaska	2.72	+1.91	+3.38

TABLE 66 (Cont'd)

State	*% Change in Enrollment Between Fall 1971 and Fall 1975*		*Projected Change Fall 1975 to Fall 1980*
	K-8	*K-12*	*K-12*
(2-4%, continued)			
Utah	2.63	.57	6.28
Texas	2.56	1.76	NR
West Virginia	2.06	.58	7.57
0-2%			
Oregon	1.94	1.14	3.49
Massachusetts	1.92	+ .74	7.36
North Carolina	1.88	.62	3.74
Georgia	1.88	1.97	NA
Idaho	1.78	.47	NA
Nevada	.04	+4.46	NA
+			
New Hampshire	+1.17	+4.26	NA
Florida	+2.57	+4.42	+2.78
Arizona	+2.99	+3.98	+7.42

*NR = Survey not returned.
**NA = Data not available.

> city would rank second among areas experiencing severe declines. Nineteen states ranked second order cities among areas most likely to experience decline.
>
> Large cities are viewed as areas of highest decline whether or not the state is itself experiencing large, moderate or small declines. The ranking of large and second order cities as those likely to experience the highest decline was also evident in some rural states (Arkansas, Kansas, South Dakota and Vermont). In five of the eight states not ranking cities as the principal candidates for decline, rural areas and small towns were ranked one and two.
>
> Our analysis of existing data showed that only 12 of 85 city districts in the nation's largest cities had enrollment increases between 1970 and 1974--three in Florida and two each in Texas and California. Despite these few increases--most of which occurred in the "sunbelt" states--principal cities in the South and West, like other cities around the country, primarily experienced enrollment declines.
>
> Texas presents a good example of that situation. Although Austin and El Paso show increases of 6.3 and 0.7 percent respectively, Corpus Christi, Dallas, Fort Worth, Houston and San Antonio's principal city districts all experienced marked declines. Out-migration from the city districts of non-minority pupils and absolute increases of minority group pupils within large city districts have produced substantial changes in the enrollment mix in Texas cities. For example, in Dallas and Fort Worth, increasing Black and Spanish-surname enrollments occurred simultaneously with decreases in non-minority enrollment. Substantial declines in non-minority enrollments are responsible for the overall district declines in Corpus Christi and San Antonio. Similar changes can be observed in the mix of enrollment characteristics in many of the 85 largest cities. The changing composition of city school district enrollments has profound effects on the educational and fiscal needs of such districts."

In sum, the national decline in enrollments does not imply universal distress. Declining enrollments are not a uniform phenomenon. They are occurring predominately in Northeast, Mid-Western, Mid-Atlantic and

Pacific coastal states while the South and Southwest enjoy a boom. To complicate matters further, both enrollment declines and increases occur in the same state with very small districts experiencing both shrinking and growing student populations. Especially hard hit will be big cities already in great fiscal distress.

C. Big City School Systems

Big city school systems are faced with special problems in this period of decline in enrollment. The 27 largest cities in the country peaked in their total school enrollment in 1970-71 at 5.4 million. In 1975-76, enrollment declined to the level of 1962-63 (Figure 65 and Table 67).

Of equal if not greater significance than the drop in enrollment is the pattern of minority group students in those big city school systems. In the period of 1968 to 1974, those 27 school systems increased an average of 9.5 percent in minority student enrollment. As of 1974, the average student minority enrollment was 67.1 percent (Table 68).

The rate of minority participation of the big city school systems is greater than the percent of minority populations in these cities (Table 69).

The minority student enrollment itself undoubtedly correlates with the relative degree of impoverishment of minority families. Table 70 shows that in 1970 the percent of families at or above the poverty level

FIGURE 65

ENROLLMENTS IN THE TWENTY-SEVEN GREAT CITIES [11]

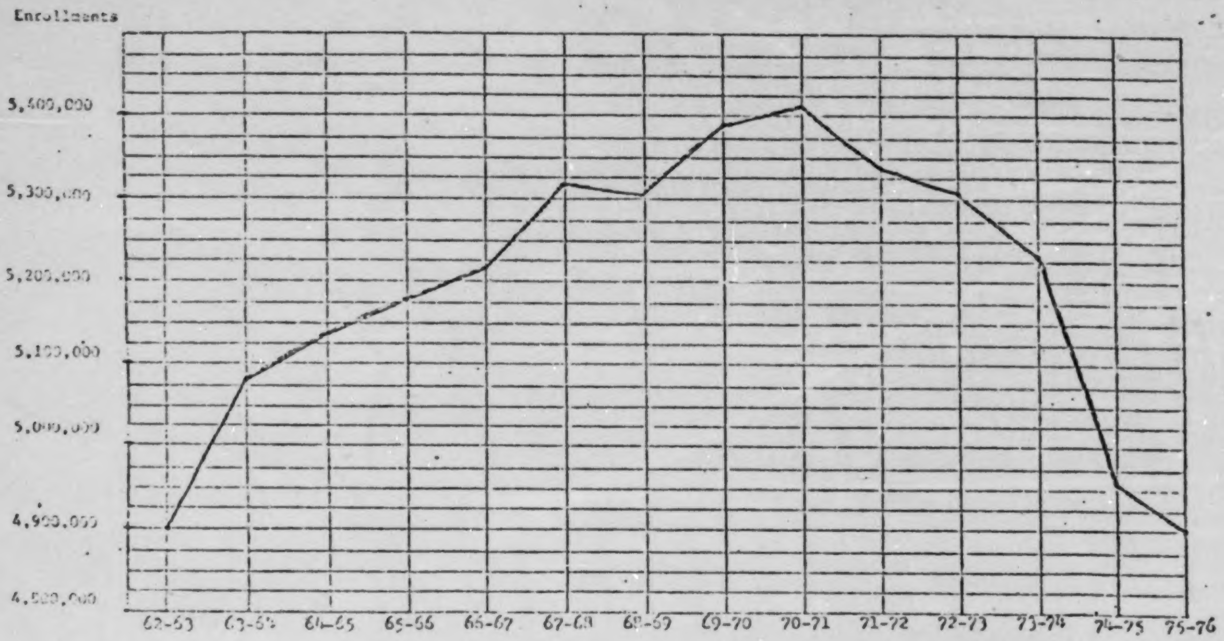


TABLE 67

STUDENT POPULATION CHANGES 12

	1968	1969	1970	1971	1972	1973	1974	1975	*Net Loss	% Decrease
Atlanta	111,227	109,664	105,598	100,316	96,006	88,125	85,298	84,300	26,927	24.2%
Baltimore	192,171	193,123	192,458	190,735	186,507	182,733	182,733	171,451	21,672	11.2%
Boston	94,174	94,887	96,696	96,583	96,239	93,647	87,169	76,005	18,882	19.9%
Buffalo	72,115	71,441	70,305	68,217	64,296	60,752	58,950	56,879	13,165	18.3%
Chicago	582,274	582,071	577,679	574,495	553,342	539,365	530,188	530,000	52,274	9.0%
Cleveland	156,054	150,718	153,619	148,854	145,196	137,569	132,029	127,123	28,931	18.5%
Dade County (Miami)	232,465	244,016	240,447	244,765	241,809	244,395	246,548	244,439	2,109	
Dallas	159,924	162,490	164,736	157,799	154,581	153,549	149,510	142,034	27,702	13.7%
Denver	96,577	96,634	97,928	94,808	91,616	87,620	79,670	76,503	21,425	21.8%
Detroit	296,097	238,383	284,396	282,076	276,655	263,958	257,396	246,981	49,116	16.6%
Long Beach	72,065	70,472	69,927	69,205	63,838	62,413	62,339	59,271		
Los Angeles	653,549	654,654	642,895	633,951	620,659	611,228	598,314	609,645	45,009	6.8%
Memphis	125,813	134,190	148,304	145,903	138,714	119,542	120,186	118,267	30,037	20.3%
Milwaukee	130,445	132,462	132,349	131,815	127,986	123,224	118,474	115,700	16,762	12.6%
Minneapolis	70,006	68,278	66,938	65,201	61,565	58,833	56,161	53,271		
Nashville	93,720	95,821	95,313	88,190	85,406	83,521	80,118	80,231	15,590	16.2%
New Orleans	110,783	110,664	109,856	108,969	103,839	98,828	93,927	95,729	15,054	13.6%
New York City	1,063,787	1,115,870	1,140,359	1,131,058	1,125,449	1,104,920	1,103,406	1,102,905	37,454	3.2%
Oakland	64,102	61,679	67,830	67,323	65,189	60,703	61,559	54,768		
Philadlephia	282,617	283,209	279,829	273,458	282,965	267,902	266,500	262,500	20,709	7.3%
Pittsburgh	76,268	73,500	73,481	71,502	70,080	68,414	66,106	63,629		
Portland	78,413	77,806	76,206	72,694	68,632	66,325	63,514	62,002		
St. Louis	115,582	113,374	111,233	107,986	105,617	98,850	93,320	86,999	28,583	24.7%
San Diego	128,914	129,531	128,783	128,327	124,487	123,466	123,114	122,000	7,531	5.8%
San Francisco	94,154	93,139	91,150	83,584	81,970	78,010	67,719	70,777	23,377	24.5%
Toledo	61,684	62,965	61,699	62,597	61,694	59,911	59,049			
Washington	148,725	148,931	145,330	141,806	140,000	136,036	130,807	130,685	18,246	12.2%

*From Year of Largest Enrollment to Year of Latest Available Figures, viz, 1975

Source: Office of Civil Rights: 1975 Data - Educational Research System Bulletin, February, 1976

Compiled by: Council of the Great City Schools
Washington, D.C.
January, 1976

TABLE 68

MINORITY PERCENTAGE OF TOTAL ENROLLMENT IN GREAT CITY SCHOOL SYSTEMS[13]

	1968	1970	1972	1974	Increase in Percentage 1968-1974
Atlanta	61.8	68.7	77.4	84.9	23.1
Baltimore	65.1	67.1	69.3	70.4	5.3
Boston	31.5	35.9	40.5	47.7	16.2
Buffalo	39.1	41.7	45.1	47.7	8.6
Chicago	62.3	65.4	69.0	72.5	10.2
Cleveland	57.5	59.7	59.9	60.6	3.1
Dade County	41.7	46.2	51.6	54.0	12.3
Dallas	38.8	42.7	49.4	55.5	16.7
Denver	34.4	38.3	41.7	45.6	11.2
Detroit	60.7	65.5	69.5	73.6	12.9
Long Beach	14.7	16.8	NA	26.2	11.5
Los Angeles	46.3	49.6	52.7	58.0	11.7
Memphis	53.7	51.6	58.0	69.9	16.2
Milwaukee	27.0	29.7	33.9	38.4	11.4
Minneapolis	10.7	13.0	15.9	19.1	8.4
Nashville	24.2	24.9	28.1	NA	3.9
New Orleans	68.7	71.4	76.2	80.8	12.1
New York City	56.1	61.7	64.4	65.6	9.5
Oakland	69.1	71.7	75.0	78.2	9.1
Philadelphia	61.3	63.6	64.8	66.8	5.5
Pittsburgh	39.7	40.6	42.3	43.4	3.7
Portland	10.5	12.0	14.0	15.6	5.1
St. Louis	63.8	65.9	69.1	70.4	6.6
San Diego	23.9	24.6	26.3	30.3	6.4
San Francisco	58.8	63.1	68.2	69.2	10.4
Toledo	29.2	29.5	30.5	33.6	4.4
Washington	94.4	95.5	96.5	96.7	2.3
Average	46.1	48.8	53.4	67.1	9.5

TABLE 69

MINORITY POPULATIONS IN THE BIG CITIES AND BIG CITY SCHOOL SYSTEMS[14]

	% Minority Pop. in Total City Population-1970	% Minority Student Enrollment - Fall 1974	City Minority Pop. as a % of State Minority Population-1970	City Minority Student Enrollment as a % of State Minority Student Enrollment - Fall 1972	% Minority Pop. in Total Suburban (SMSA-City) Pop.-1970
Atlanta	51.89	84.9	21.32	21.15	6.66
Baltimore	47.02	70.4	58.55	53.49	6.47
Boston	17.41	47.7	55.01	49.55	1.63
Buffalo	21.26	47.7	4.10	3.17	2.25
Chicago	34.47	72.5	76.60	74.41	4.07
Cleveland	38.99	60.6	29.14	27.74	3.78
Dade County	23.42	54.0	7.33	29.22	12.61
Dallas	25.84	55.5	14.74	8.18	5.80
Denver	10.98	45.6	59.52	39.43	1.46
Detroit	44.50	73.6	64.57	56.45	4.00
Long Beach	8.24	26.2	1.35	1.03	14.91
Los Angeles	22.81	58.0	29.31	26.04	9.07
Memphis	39.16	69.9	38.79	42.45	32.18
Milwaukee	15.57	38.4	70.37	70.93	.57
Minneapolis	6.44	19.1	40.60	38.20	1.58
Nashville	19.91	28.1	14.17	12.67	9.07
New Orleans	45.51	80.8	24.55	22.73	12.82
New York City	23.38	65.6	76.83	79.27	6.43
Oakland	40.94	78.2	6.75	3.91	14.07
Philadelphia	34.37	66.8	63.43	63.59	7.07
Pittsburgh	20.73	43.4	10.21	10.26	6.22
Portland	7.85	15.6	50.56	48.39	1.32
St. Louis	41.34	70.4	51.55	48.42	7.50
San Diego	11.09	30.3	3.52	2.61	4.35
San Francisco	28.57	69.2	9.33	4.45	13.79
Toledo	14.25	33.6	5.45	6.03	1.66
Washington, D.C.	72.33	96.7	-----	100.00	8.97

TABLE 70

URBAN FAMILIES AND STUDENTS BELOW THE POVERTY LEVEL[15]

	% Families Below Poverty Level - 1970		% Students Below Poverty Level - 1975
	City	Suburbs	City
Atlanta	15.9	9.1	30.0
Baltimore	14.0	8.5	31.2
Boston	11.7	6.1	45.7
Buffalo	11.2	6.8	53.2
Chicago	10.6	6.8	40.5
Cleveland	13.5	6.9	34.5
Dade County	16.4	10.9	19.0
Dallas	10.1	8.6	36.3
Denver	9.4	6.8	26.1
Detroit	11.3	6.5	37.1
Long Beach	8.2	8.2	18.0
Los Angeles	9.9	8.2	24.8
Memphis	15.7	16.8	41.2
Milwaukee	8.1	5.7	28.0
Minneapolis	7.2	4.6	26.1
Nashville	10.3	11.2	20.7
New Orleans	21.6	16.4	56.7
New York City	11.5	9.3	45.8
Oakland	12.2	7.2	36.9
Philadelphia	11.2	7.3	43.1
Pittsburgh	11.2	7.2	37.8
Portland	8.1	6.9	21.2
St. Louis	14.4	8.1	42.6
San Diego	9.3	8.6	16.4
San Francisco	9.9	7.2	35.7
Toledo	7.7	6.6	19.1
Washington, D.C.	12.7	6.1	33.7
	11.60	8.24	33.38

Compiled by: Council of the Great City Schools
Washington, D.C.
January, 1976

in the city and surrounding suburbs of these 27 largest cities. The percent of students from impoverished families in these cities is far in excess of the percent of families in poverty, 33.4% vs. 11.6%.

D. Effects on Teachers

The NIE studies to date from early indications in regions already experiencing decline lead to the following conclusions:[16]

- Teacher requirements may decline more rapidly than the supply of new teachers, exacerbating the problem of surplus.
- Declining enrollment is expected to reduce the demand for teachers and although projections show a decrease in the supply of new teachers, the oversupply should persist for some time. The NCES projections are shown in Table 71.
- Older, more experienced teachers will be retained raising costs and levels of experience. While this might appear to increase the quality of education, there are many associated problems.
- Members of minorities will be the first to go during reduction of the work force.
- Comprehensive collective bargaining agreements may lead teachers to bargain for even more policy issues, such as smaller class size.

Declining enrollments may increase average instructional costs since the teachers retained will be at higher pay levels. Instructional costs comprise over half of the current expenditures. A ten percent increase in teaching costs would raise per pupil costs five percent.

TABLE 71

-Estimated demand for classroom teachers in regular public elementary and secondary day schools: United States, fall 1969 to 1984 17

[In thousands]

Year (fall) (1)	Total teacher demand (2)	Demand for additional certificated teachers[2]			
		Total (3)	For enrollment changes (4)	For pupil-teacher ratio changes (5)	For teacher turnover (6)
1969	2,013	...	...	...	...
1970	2,055	202	15	26	161
1971	2,063	172	9	-1	164
1972	2,103	205	-12	52	165
1973	2,138	203	-7	42	168
1974	2,159	192	-19	40	171
1970–74	...	974	-14	159	829
		PROJECTED[3]			
1975	2,168	182	-11	20	173
1976	2,179	184	-16	27	173
1977	2,169	164	-30	20	174
1978	2,155	160	-40	26	174
1979	2,130	147	-46	21	172
1975–79	...	837	-143	114	866
1980	2,105	145	-41	16	170
1981	2,095	158	-31	21	168
1982	2,091	164	-20	16	168
1983	2,104	180	-4	17	167
1984	2,134	198	13	17	168
1980–84	...	845	-83	87	841

[1] Includes full-time and the full-time equivalent of part-time classroom teachers (in 1974, 99 percent of teachers in the public schools were full-time). The 1968 data include some part-time teachers who were not converted to full-time equivalents. Does not include teachers in independent nurseries and kindergartens, residential schools for exceptional children, subcollegiate departments of institutions of higher education, Federal schools for Indians, federally operated schools on Federal installations, and other schools not in the regular school system.

[2] The estimates and projections of demand for additional certificated teachers were based on the following assumptions: (1) For changes in pupil-teacher ratios, the number of additional teachers needed is the total teacher demand in a given year less the estimated total teacher demand in the same year had the pupil-teacher ratio in the previous year remained constant. (2) For enrollment changes, the number of additional teachers needed is the total needed for both enrollment changes and pupil-teacher ratio changes less the number needed for pupil-teacher ratio changes alone; the number of additional teachers needed for both enrollment changes and pupil-teacher ratio changes is the total teacher demand in a given year less the total teacher demand in the previous years. (3) For teacher turnover, the number of additional teachers needed to replace those leaving the profession either temporarily or permanently will be 8 percent of the total employed in the previous year; the 8-percent separation rate is based on the Office of Education study *Teacher Turnover in Public Schools, Fall 1968 to Fall 1969.*

The projected demand makes no allowance for replacement of teachers who hold substandard certificates (less than 2 percent of employed teachers in 1972).

[3] The projection of classroom teachers in public schools by organizational level and institutional control is based on the assumption that the pupil-teacher ratio will follow the 1964–74 trend to 1984.

For further methodological details, see appendix A, table A-3.

Declining enrollment could adversely affect minorities and women.

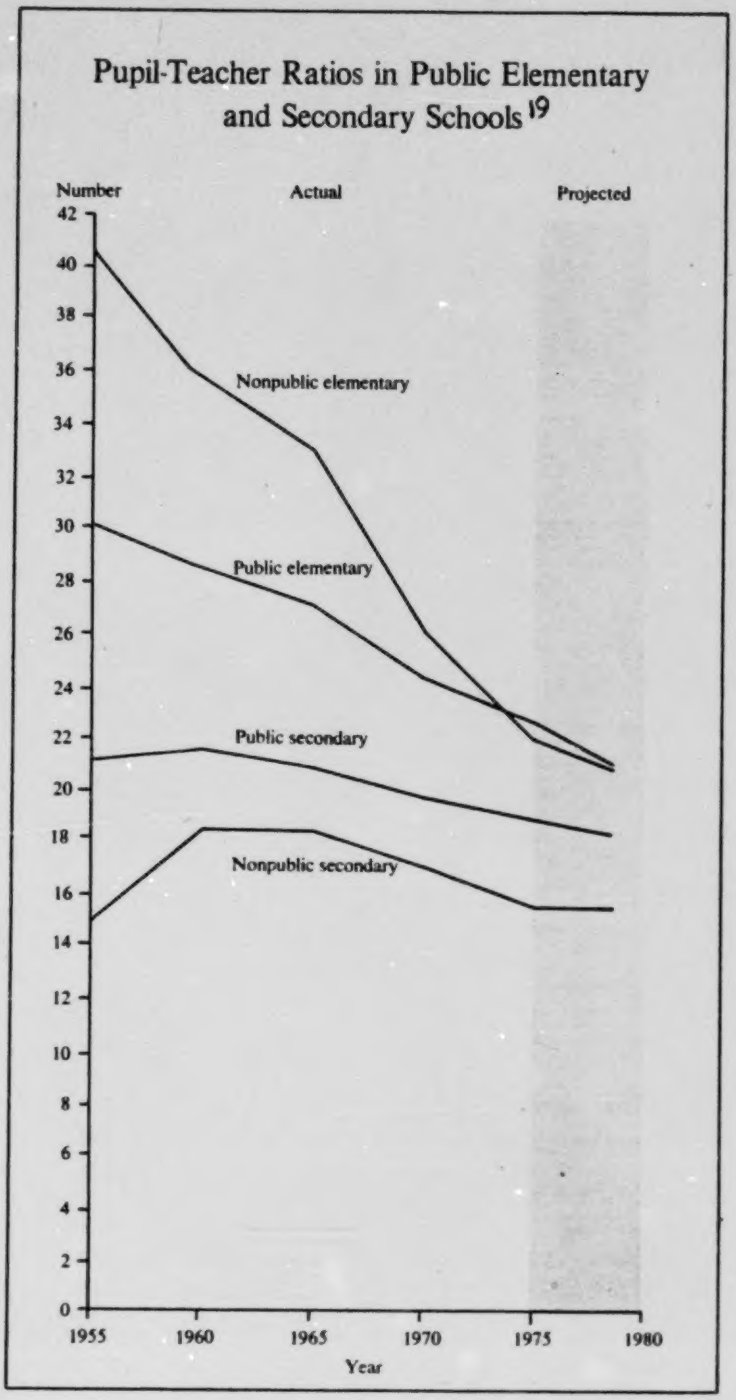
- The psychology of rewards have been closely tied to advancement and promotion. Decline could be accompanied by loss of motivation, frustration and morale problems.
- Minority teachers could be the most severely affected and could lose many of their recent gains. In 1975, minorities comprised 14.5% of pre-school and kindergarten teachers, 10.6% of elementary school teachers and 7.8% of secondary school teachers.
- They were even more heavily represented among teacher aides (33.5%) and among service workers (25.3%).
- Declining enrollment may accelerate unionization and militancy with a demand to play a bigger role in policy formulation. This is, in fact, already happening. AFT membership has grown from 100,000 to 440,000 in 1974. In 1966, 26% of all agreements were comprehensive (included policy input); by 1970, 43% of all agreement were comprehensive. One example of a bargaining point is class size. In 1966-67, there were 222 agreements including provisions for teacher input on the determination of class size; in 1970-71, there were over 800.

E. Possible Teacher Shortage in the Mid-1980's

A study by Peter Morrison points to the possibility of a teacher shortage sometime in the 1990's.[18] The factors behind this possiblity are:

- The poor job market, which could discourage students from entering teacher training,

FIGURE 66


Pupil-Teacher Ratios in Public Elementary and Secondary Schools[19]
Number
Actual
Projected
42
40
38
36
34
32
30
28
26
24
22
20
18
16
14
12
10
8
6
4
2
0
Nonpublic elementary
Public elementary
Public secondary
Nonpublic secondary
1955
1960
1965
1970
1975
1980
Year

- The age structure of the current stock of teachers and especially of the reserve pool of teachers, which consists of former teachers who have left the field to raise families and whose children are either grown or considered old enough to leave. By the late 1980's a large number of these persons, products of "the initial large cohorts of teachers produced in the mid 1950's will be reaching advanced ages."
- A projected annual increase of 2 to 3 percent a year in school enrollments, due to begin in 1985.

The projected teacher's shortage need not be a matter of urgent or pressing concern now, it may be dealt with flexibly should the time of shortage approach. Should the upsurge in school enrollments begin in the mid-80's it will already be visible some five years earlier from both national and local birth records, and other statistical data. As far as the stock of teachers goes, there will still be potentially substantial flexibility in the system at that time.

Impending demographic trends, in conjunction with recent gyrations in the market for teachers and the teachers-production system, could reverse today's teacher surplus quite suddenly. A shortage of teachers sometime in the mid-80's is a possiblity for complex reasons analogous to the well-known corn hog cycle in farming.

The adoption of some form of the California system in which persons with B.A's can be certified after one additional year of training would give added job flexibility to those potentially entering education and would not require a commitment four years before job openings, but only a commitment for a year or so. Furthermore, some of the vast reservoir of retired teachers or people who have gone into teacher training and never utilized it may be available for credentializing. The anticipated teacher shortage of whatever scope, therefore, does not seem to present a significant problem now or in the future. These observations are not intended in anyway to undercut the potential concerns of schools of higher education, over their role in teacher production, nor are they intended to overlook the potential response of organized teachers urging alternative public strategies.

In the same way that the upturn of teachers is manageable, the need for new facilities does not seem to present any large scale nationwide problem. It probably can be dealt with in terms of better local planning.

F. Impacts of Decline on District Management

The NIE conducted studies through the National Conference of State Legislatures on how the state of Iowa managed its school decline. Iowa is a state that has suffered the nation's most severe enrollment decline in the early 1970's. The authors of that study conclude:[20]

- capital costs, debt service and building maintenance are largely fixed and fixed costs must be amortized over fewer students;
- average teacher salaries are pushed toward the upper end of the salary schedule as attrition is reduced and there are fewer openings for new teachers;
- community residents staunchly resist neighborhood school closings, potential fiscal economy; and
- because many state formulas are based on per capita outlays, enrollment declines mean reduced state funding.

In general, the limited number of case studies of decline do suggest the following as stated in the NIE study:[21]

- "First, many of the supposed woes resulting from declining enrollment are likely to be the product of other trends.
- "Second, that declining enrollment can result in the erosion of service quality, but not nearly to the degree that some believe.
- "Third, that public officials who want to compensate for the disruptions of declining enrollment would be well advised to demand proof that declining enrollment is causing the specific hardship that some allege."

Although decline has had mixed effects, the authors contend it has failed to provide any major shifts in the quality and character of local school services. Whereas districts claim that decline inhibits innovation and expansion, they also report their adjustments to it have yet to result in programmatic cutbacks. Rather, what does seem to be occurring is a renewed interest in reorganization of local attendance areas and grade divisions as well as in school district consolidation.

The authors also found that declining enrollments in Iowa was the impetus behind the state's revision of its school finance formula. The state used the reduced per pupil demand on state resources to selectively redirect funds to poorer districts. Within the state, however, "...the prospect of declining enrollment was also used as an argument for greater state assumption of local school operating costs... Declining enrollment would permit the state to pay for an increasing share ... of education expenditures with little or no increases in the absolute number of dollars." Using the lever of declining enrollment, by 1975 "...only two other states--Florida and New Mexico--could claim less variation in their local per pupil operating expenditures."[22]

G. Uses of Demographic Data in State Education Planning

The Minnesota State Planning Agency's relationship to education has been described by Professor Van D. Mueller of the University of Minnesota as taking numerous actions "...to bring educational policy making and planning and state policy making and planning closer together."[23] Among the activities he describes are:

> Initiatives were taken with the State Department of Education to disseminate enrollment data generated by the State Planning Agency;
>
> The Planning Assistance Manual for Managing School Districts with Declining Enrollments and accompanying case studies were developed by SPA to assist and stimulate local districts in planning, and to provide the SDE with additional tools for providing technical assistance to local schools;
>
> SPA assisted in the planning and development and supported legislative actions that resulted in the enactment of two new management systems: (a) Uniform Financial Accounting and Reporting Systems (UFARS) and (b) Planning, Evaluating and Reporting System (PERS). These actions could be viewed as attempts at trend modification;
>
> Analyses were initiated by SPA in education and human services to understand fundamental age structure changes and their impact on school enrollments;
>
> Analyses were begun of educational services in rural Minnesota including the exploration of alternative structures for delivering educational programs and services. In this area SPA developed a policy paper and supported the establishment of the Educational Cooperative Service Units (ECSU's);
>
> SPA initiated analyses to examine the interactions between employment, tax revenues, changing human service demands, costs to the state, and possible reallocations over time. It was assumed that the need for reallocations between human services several years from now might require statutory changes now and also might require efforts now to establish expectations that reallocations will really happen;
>
> Exploratory studies in enrolllment trends continue under the auspices of the state demographer. A detailed study of population migration and its impact at the school district level has just been completed; and

> A day and a half seminar on the fiscal implications of enrollment decline sponsored by SPA for the full membership of legislative education committees and research staff.

He points out that these actions:

> ...represented attempts to include education in the state's total policy and planning scheme by relating the planning for education with the planning in education and thereby increasing the political viability of educational planning at the state and local levels.

California

The State of California system has a Population Research Unit which is set up mainly to aid state agencies.[24] It is located within the Department of Finance, estimates and projects California population by various levels of detail. It analyzes the implications of its findings upon request. Most requests handled come from other State agencies, particularly other units and divisions within the Department of Finance. The Unit's regular output includes an annual estimate of total population by approximately 500 cities and counties as well as projections, done every 2 to 3 years, of population by county and age. A range of projections are done using several fertility and migration assumptions. The basic data for these projections comes from the Federal census, supplemented by special county censuses. These are supervised by the Population Research Unit or a cooperative basis with local governments. The Unit also assists localities other than counties to do special censuses when requested. Since 1970 it has provided technical assistance, including final tabulations, for such censuses for twenty school districts which requested special financial assistance from the State Allocation Board because of sudden population increases.

In addition to straight population work, the Unit projects education statistics using the grade progression method and age participation rates. Enrollment at the K-12 level is done for the State as a whole; numbers of high school graduates are done by county. Work is currently underway to develop projections for community college districts. Recent state legislation requires an annual estimate of the adult population (18 and over) for community college districts. The projection of high school graduates by county is a major input in the enrollment planning of the three segments of public post-secondary education in the state.

The projection of K-12 enrollments for the State as a whole is of considerable use in planning the State budget for elementary and secondary education, but the county population projections by age are of greater potential use to local school districts. Of course, counties generally contain more than one school district and they could well be (and usually are) growing or declining differentially. Nevertheless, reliable information about the population prospects for the immediate area is a more useful base from which to begin estimating a district's likely change than statewide or national figures.

More importantly, the techniques used by the Population Research Unit to project county changes could be approximated for district changes, albeit with greater uncertainty of accuracy. If the use of such techniques were tempered with a sound knowledge of the locality, school districts could get a fairly good base for planning. It should be noted here that the Unit suggests that counties include school district boundaries on their maps when special county censuses are taken. If they do, the census data, including age, grade, and housing data, is available for the districts separately, i.e., is identifiable in the computer printout. This would be an excellent base for projecting enrollments, but many counties do not understand this or find it too troublesome and do not bother.

Unfortunately, neither the projections nor the technical assistance of the Population Research Unit have been as well utilized as they might have been by local districts, many of which seem unaware of their availability or are perhaps unsure about how to utilize such help. The Population Research Unit does not at present have the time or resources to conduct an outreach program for local school districts, nor the capability to do projections for any considerable number of them.

The potential, however, is there. Given the experience of the Unit's staff with population estimation and projection and their associated pitfalls, and the availability of a good data base which could be generated through the special census, the school districts of the State of California could develop a good idea of the future level and distribution of their enrollments. All that is required is some awareness of the possibilities by local districts and a moderate increase in the resources of the Population Research Unit.

In its work with state agencies, the Population Research Unit will help local jurisdictions on request but apparently requires them to assume some part of the cost. It has run special censuses of school districts, and it has applied technical advice and computational services. The leg work is generally supplied by the district, typically by PTA volunteers.

As near as we can tell, it does not have an active outreach program to school districts of local jurisdictions.

Florida

In a study on enrollments at the University of Florida, College of Education, the demographic factors that were most troublesome, that is, the major source of error or uncertainty, were future fertility patterns and future migration. The study also pointed out that there were detailed complications in converting head count projections into full-time equivalents and that the non-compulsory nature of last year's secondary education set some limits on the use of age cohort data.[25]

Summary

While this look at the state agencies' activities I can make no claim to be exhaustive, it seems to be the case that demographic planning at the state level is not particularly sophisticated. Furthermore, as one moves down the jurisdictional ladder, the situation becomes more haphazard and spotty.

H. Some Opportunities

A significant opportunity exists to stimulate the integration of demographic data by state and local officials into educational planning. There is a place for nationally generated projections of state and local populations. There is also a useful role for state and more locally generated population projections. Demography as an applied activity has a strong subjective element in the application of judgment. Furthermore, familiarity with local circumstances can play a major part in whether a given forecast is policy useful or policy irrelevant. In general, there is not enough expertise now at the state and local level to meet this need.

The highest payoff actions meeting the clearest needs are those involved in the generation and distribution of knowledge about demographic trends to relevant state and local government planners. This generation and dispensing action could flow out of research, monitoring, surveys and data gathering and to some extent from demonstrations.

The second major action area is building capacity at the state and local level for better, more effective, and timely planning in response to unfolding demographic trends.

Some of the detailed actions which seem to be possible and effective in dealing with the situation are drawn together in Section I.

VIII. RESPONSES TO DECLINE

The previous section pointed out there were three general responses to declining enrollments:

- contract
- expand services to present clienteles
- expand services to new clienteles

The previous section dealt primarily with the first of these options. This section deals with the expansion of services; first, through expanded child care, and second, through meeting adult learning needs.[1]

A. Expanded Child Care

Meeting the market for various new and expanded day care and child care services is compatible with several demographic, and non-demographic, and non-demographic factors. These are:

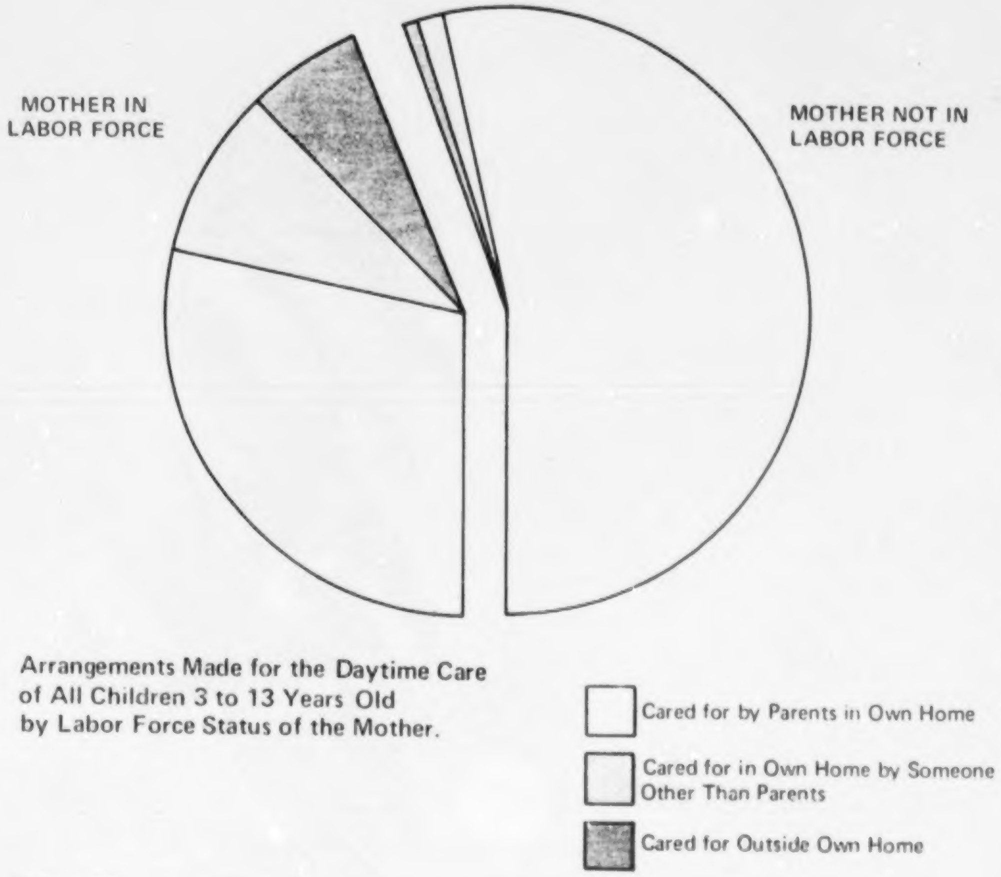
- surplus or underutilized capacity;
- surplus teachers who represent partially trained skills to deal with children in expanded service contexts;
- single-parent families--presumably with more stressful environments, less parenting time and more need for services;
- more working mothers with
  - more preschool children,
  - needs for care for children, particularly aged 6 to 13 in the after school period;
- changing ethnic and social patterns especially in large cities, requiring more services.

These affect the demand for educational and child-care services. Women in the labor force must have some alternate form of child-care. There are various alternatives which depend on the age of the child and the services currently in existence. If her child is under 3 years old, a mother who works generally must find some day-care arrangement for her child. She will either arrange for individual care in her own home or outside--in another home or place her child in a day-care center. If she has children between 3 and 5 years of age, a mother may enroll them in school, full-day or part-day, and then have some other form of day-care for the remainder of the day. If the child is 6 to 17 years old, there is demand for after school hour services. These range from merely custodial services to organized extra-curricular activities and school sponsored clubs to after school classes.

Very little is known about the number, kind, type and duration of pre-school and after-hour elementary school services now available to children of working mothers. We also know only a little about the preferences of these mothers; that is, whether if given a choice, they would prefer care in their home by a relative or a non-relative or prefer enrolling their children in day-care or pre-school programs. The current practice of working women with small children is to choose relatives or friends rather than formal day care centers (Figure 67). However, the

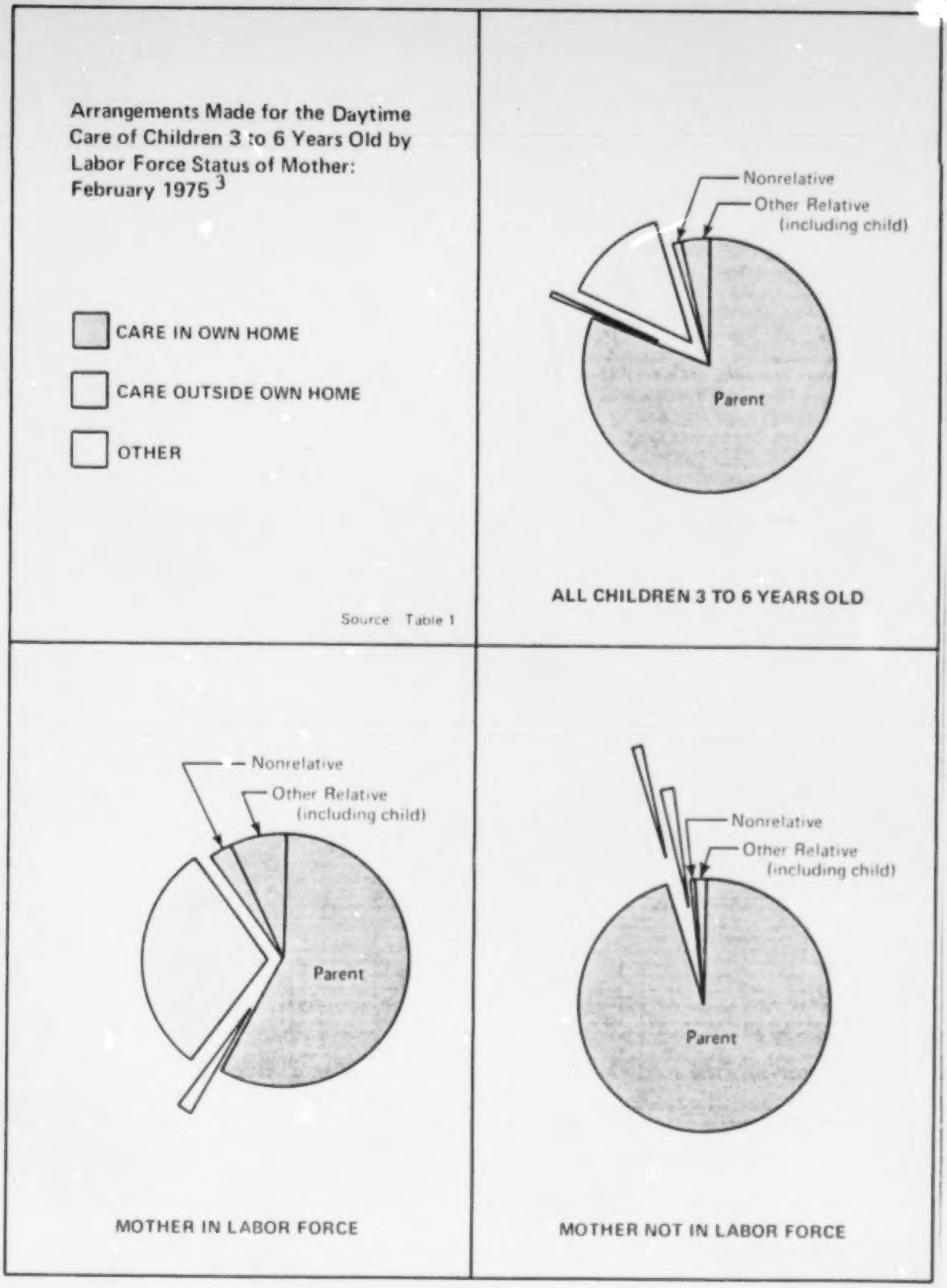
FIGURE 67

DAYTIME CARE OF CHILDREN: OCTOBER 1974 AND FEBRUARY 1975[2]



Arrangements Made for the Daytime Care of All Children 3 to 13 Years Old by Labor Force Status of the Mother.

FIGURE 68



Arrangements Made for the Daytime Care of Children 3 to 6 Years Old by Labor Force Status of Mother: February 1975 [3]

Source: Table 1

growth in nursery schools for educational purposes is proof that families may place young children in facilities that are more than custodial. The growth in pre-school day care will depend on the interaction of the quality of services available and their relative accessibility for the children of working mothers.

Nursery School and Kindergarten Enrollment

The number of children 3 to 5 years old declined in the past decade, but in the same period the number of children enrolled in pre-elementary school programs increased (Figure 69). The greatest proportional increase has occurred in the nursery schools, where the enrollment doubled. Kindergarten enrollment, which has increased rapidly before, increased also by about a quarter. In 1976, about half of the 3 to 5 years old children were enrolled in pre-school programs (Table 72 and Figures 70 and 71).

Both Black and white children are enrolled at higher rates. Enrollment increases have occurred for children of mothers in the labor force and for children whose mothers are not in the labor force. Enrollment rates of children are strongly related also to the educational attainment of employed mothers.

TABLE 72

PROGRAMS BY YEARS OF SCHOOL COMPLETED BY MOTHER[4]

PERCENT OF 3 TO 5 YEAR OLDS ENROLLED IN PRE-ELEMENTARY

October 1967 to 1976 [4]

(Civilian noninstitutional population)

Years of school completed by mother	1976	1974	1970	1967
Total 3 to 5 years old	49.4	45.2	37.6	31.5
Elementary: 8 yrs. or less	38.3	30.8	22.4	20.5
High School: 1 to 3 years	38.6	36.0	31.9	26.1
High School: 4 years	47.9	43.8	38.0	32.2
College: 1 to 3 years	56.6	54.2	48.7	41.3
College: 4 years or more	70.4	65.3	55.8	48.7

To a large extent, differences in enrollment rates may now be due to differential accessibility of programs. Enrollment rates are highest in metropolitan areas. They are also higher in the Northeast and in the West rather than in the North Central or Southern regions of the United States.

Enrollments in prekindergarten for whites and other ethnic groups increase with income, but most sharply increase at the $10,000 and over income bracket (Figures 72 and 73).

There are some data on day-care arrangements for children under age six as a function of race, socio-economic status and income resulting from the work of Shortlidge. While this research is interesting and suggestive, it hardly forms a total base for public policy. In general, as it now stands, the following flow out of Shortlidge and Low and Spindler's work.[5] (Tables 74, 75 and 76):

- Most children are cared for in their own home--white or Black--(56 percent and 71 percent) or in another person's home (18 percent, 17 percent) as of 1971.

FIGURE 69

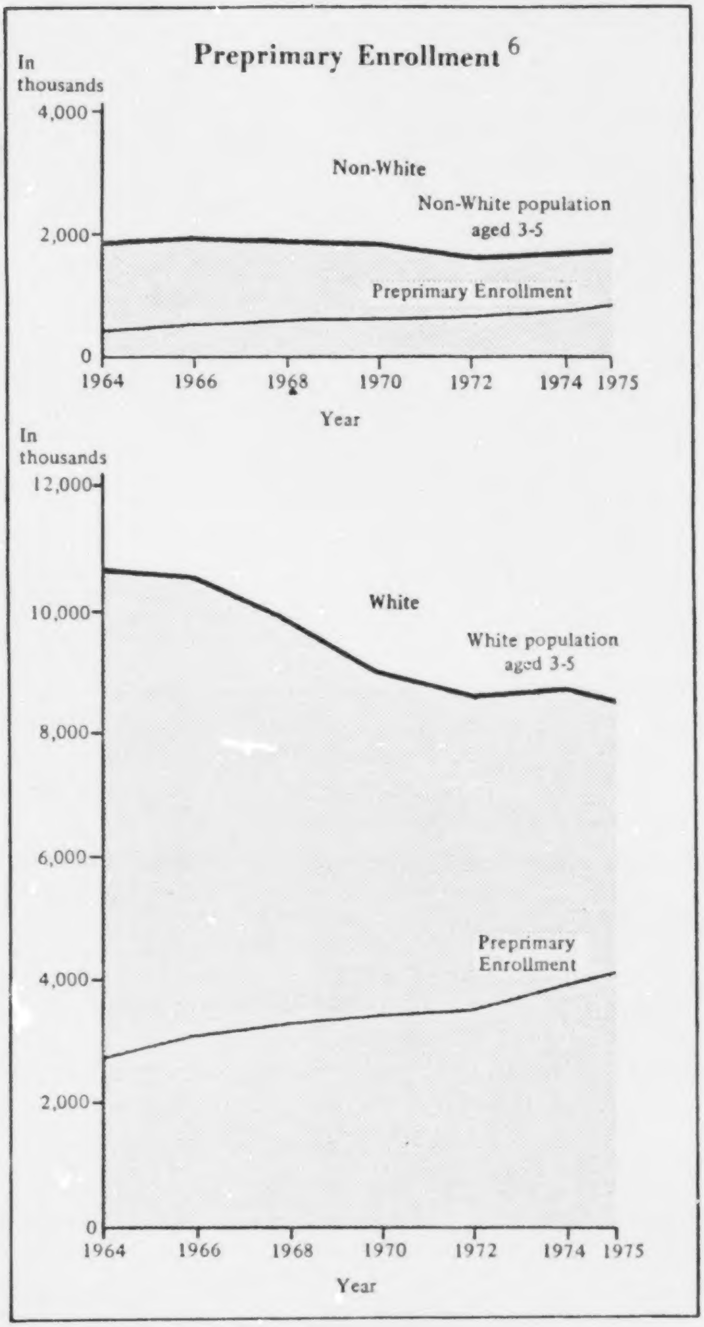

Preprimary Enrollment 6
In thousands
4,000
2,000
0
Non-White
Non-White population aged 3-5
Preprimary Enrollment
1964
1966
1968
1970
1972
1974
1975
Year
In thousands
12,000
10,000
8,000
6,000
4,000
2,000
0
White
White population aged 3-5
Preprimary Enrollment
1964
1966
1968
1970
1972
1974
1975
Year

FIGURE 70

PERCENT ENROLLED IN PRE–ELEMENTARY PROGRAMS: 3, 4 AND 5 YEAR OLDS OCTOBER 1967–1976[7]

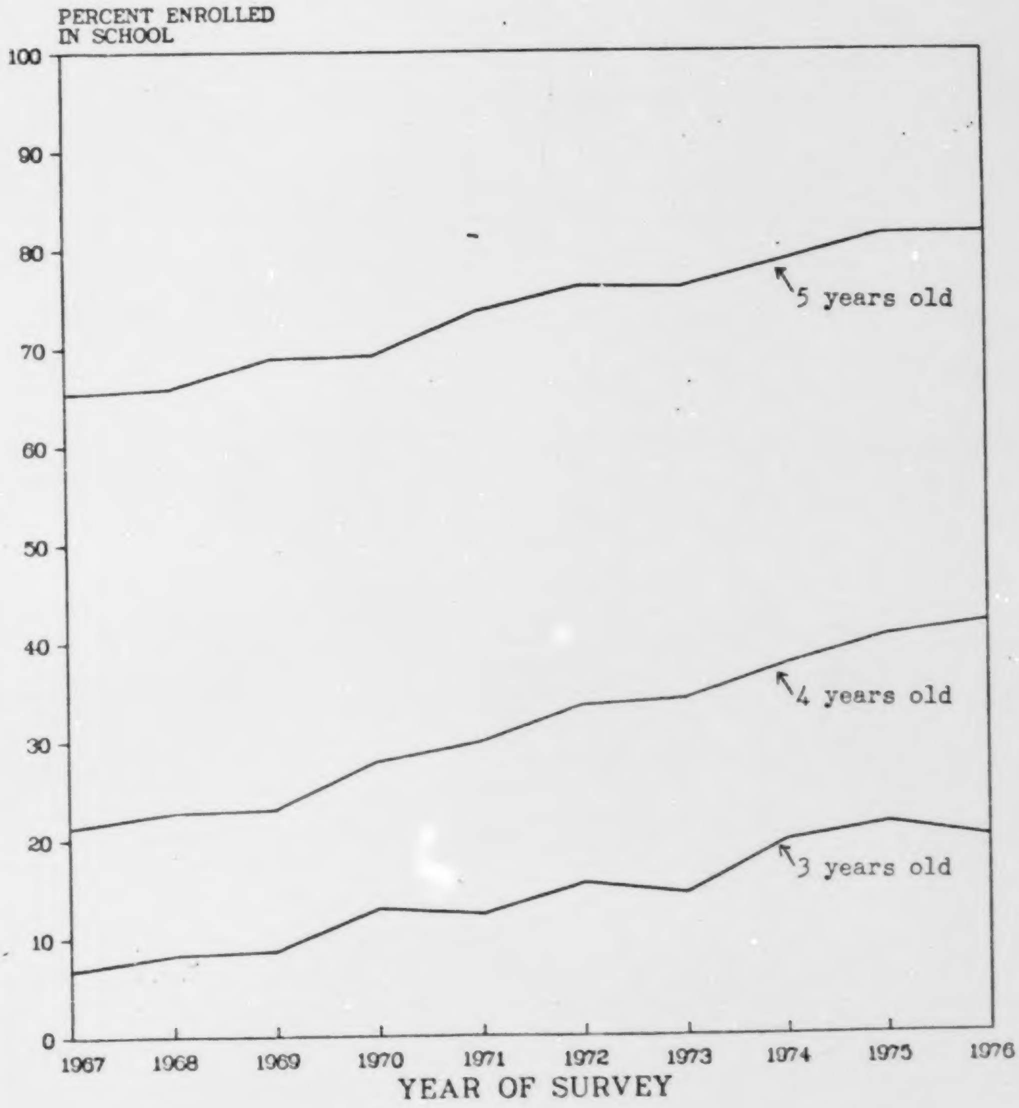


FIGURE 71

NUMBER OF 3 TO 5 YEAR OLD CHILDREN ENROLLED IN NURSERY SCHOOL AND KINDERGARDEN: Oct. 1967–1976 [8]

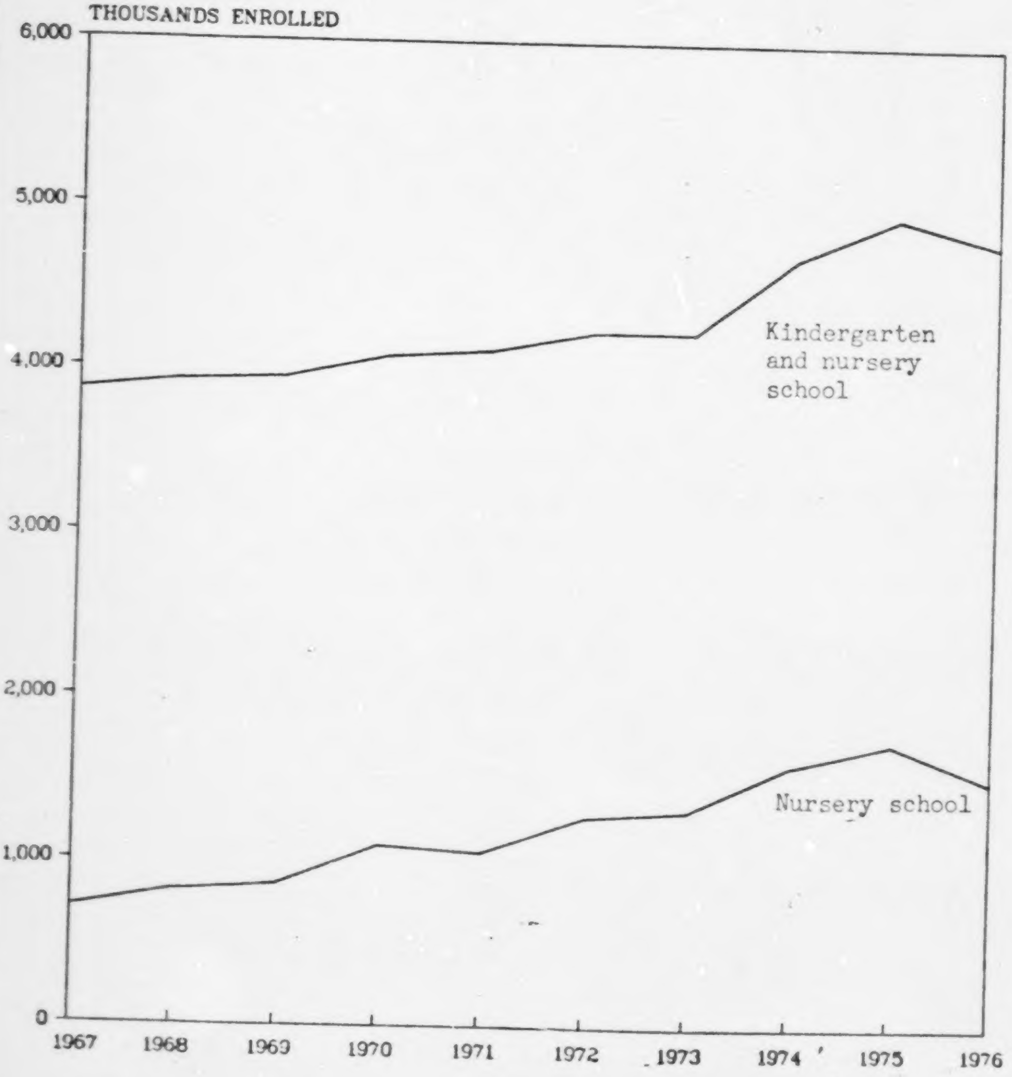
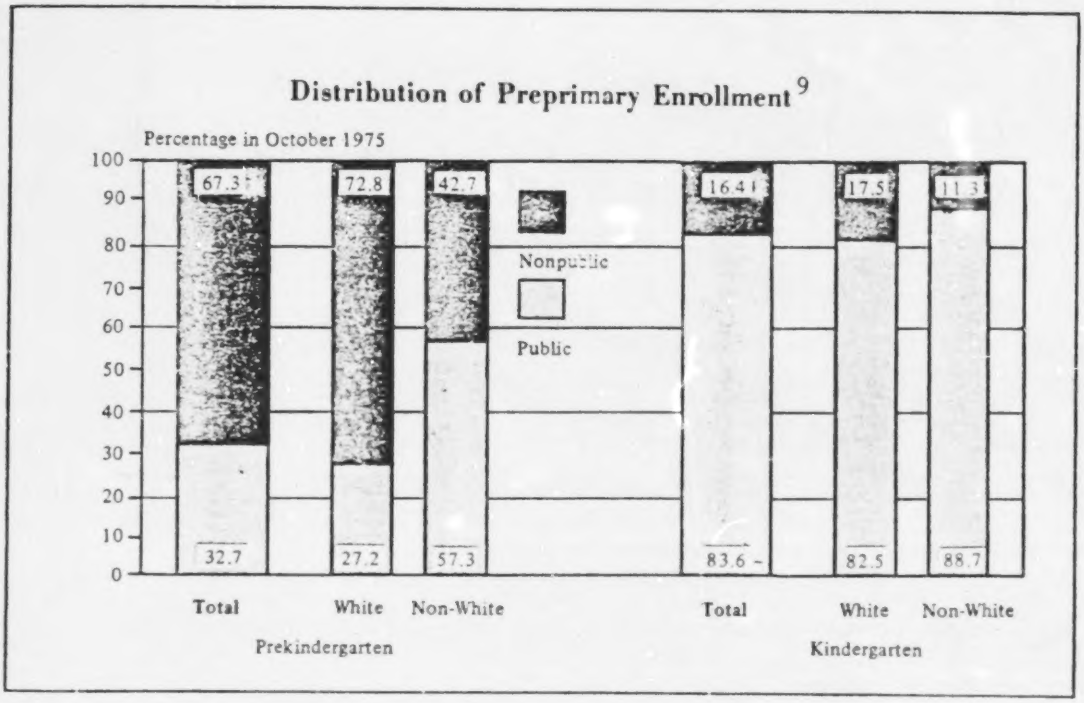


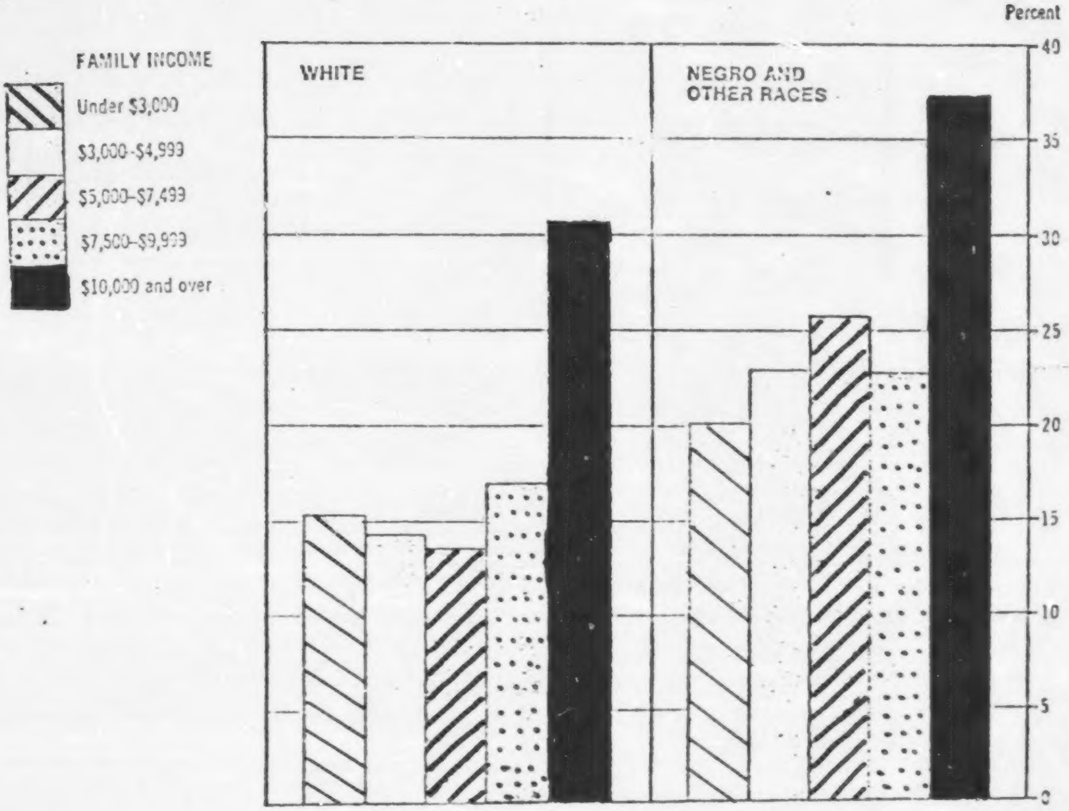
FIGURE 72



Distribution of Preprimary Enrollment[9]

FIGURE 73

PREKINDERGARTEN ENROLLMENT, BY FAMILY INCOME AND RACE: 1970-1972[10]



- Using a standard index of socio-economic status (SES), there is a tendency for children in both the low and the high socio-economic status groups to be cared for in their own homes--56 and 62 percent. For the middle SES groups, 49 percent were cared for in the home.
- The tendency across all economic categories under $3,000 to $10,000 and above, was again care in the home or care in another person's home, running about 47 and 31 percent respectively. A slight deviation for those earning $3,000 to $6,000 in which only 38.8 percent were cared for in their own home and 36 percent in others' homes is visible.

The future day care market for children aged six or younger with mothers in the work force can be estimated from the data in Table 72. There were about six million such children in 1973, a half-million more than in 1970.

2. Some Questions About Expanded Child-Care Services in Schools

This issue does not concern whether the schools should expand to perform new services since they are and will be performing them well or badly, overtly or by default. The more appropriate question seems to be one of choice; should the school attempt to optimize its beneficial impact on these large numbers of special population children? Or should it attempt to minimize the damage it does to them? In any case, the following points seem to merit further attention in terms of any public policy alternatives with regard to expanded day care.

- There are data which suggest that the crucial problem facing mothers these days is finding available service. We know, in fact, very little about the number, kind, type and duration of preschool services available to children of working mothers, and we know very little about the child-care choices that are made by working mothers or the basis for attractive opportunities and further expansion.[11]
- The choices for this new clientele would probably be influenced by such factors as nearness to home, size of the facility, access, services, scheduling. But we know very little in this regard. Unfortunately, issues involving day care, child care, and nursery schools are rapidly becoming politicized and advocacy oriented. Hence, close attention must be given to gathering reliable planning data
- Meeting the needs of the latch key child, that is, the child from nominally six to thirteen, who finishes up the school day and has relatively little to do thereafter, does not necessarily imply an expanded day for the now working teacher, nor does it even imply employment for certified teachers. There are a variety of other recreational, custodial and learning opportunities,

TABLE 73

NUMBER OF CHILDREN UNDER AGE SIX WITH MOTHERS IN THE LABOR FORCE, 1970-1973[12]

	1970	1972	1973
Total children under age 6	19,606,000	19,235,000	19,145,000
With mother in labor force	5,590,000	5,607,000	5,952,000
Percentage of children under age 6 with mother in the labor force	28.5%	29.1%	31.1%

the principal value of which would be in using the physical school facility at which the child is already located.

- Any expanded kind of care service under governmental guidance seem inevitably destined to become a candidate for credentialism, standardization of performance and quality of facilities inducing an inevitable rise in the costs either to the public purse or to the participating parent.

  Consequently, close attention should be given to any move toward institutionalization which may, in fact, have the effect of driving the most needy clientele out of the system of gratuitiously raising costs. Since large numbers of women are purposely selecting part-time work and since more women are selecting paid labor over volunteer work, attention should be given to utilizing available part-time working mothers in such child-care arrangements.

- Since the greatest demand implicit if not explicit for expanded child-care services will be in large metropolitan areas with large numbers of working women and other, special, high-service need populations, the opportunity costs of expanding day care services through school must be weighed and measured against other educational options.

TABLE 74

PERCENT DISTRIBUTION OF DAY-CARE ARRANGEMENTS FOR CHILDREN UNDER AGE SIX BY FAMILY INCOME[13]

Day-Care Arrangement	Under $3,000	$3,000 to $5,999	$6,000 to $9,999	$10,000 and Above	All Incomes
Care in own home					
Father	6.3%	13.4%	20.3%	13.3%	14.7%
Other relative					
Under 6 years old	7.6	1.2	1.3	0.4	2.1
6 years old and over	21.7	13.4	14.2	11.7	14.8
Nonrelative					
Who looked after children	6.5	6.7	11.8	9.9	8.7
Who did additional household chores	1.8	4.1	7.3	15.4	6.5
Subtotal	43.9%	38.8%	54.9%	50.7%	46.8%
Care in another person's home					
Relative	15.2%	17.8%	14.5%	8.9%	14.9%
Nonrelative	14.5	18.5	14.0	17.8	16.2
Subtotal	29.7%	36.3%	28.5%	26.7%	31.1%
Other arrangements					
Care in group care center	3.4%	6.8%	4.1%	7.7%	5.4%
Child looked after self	1.6	0.7	0.2	--	0.6
Mother cares for child at work	20.8	17.7	10.6	12.9	15.0
Mother cares for child after school	0.4	0.2	1.1	2.2	0.8
Other	--	0.2	0.7	--	0.3
Subtotal	26.2%	25.6%	16.7%	22.8%	22.1%
Total*	100%	100%	100%	100%	100%

*Totals may not add because of rounding.

TABLE 75

PERCENT DISTRIBUTION OF DAY-CARE ARRANGEMENTS FOR WHITE MOTHERS*
WITH YOUNGEST CHILD UNDER AGE SIX, BY SOCIOECONOMIC STATUS
(Duncan Index)[14]

Day-Care Arrangement	Low SES	Middle SES	High SES
Care in own home			
By father	19%	15%	7%
By sibling	13	6	12
By other relative	5	5	12
By a combination of family members	5	13	14
By family and nonfamily members	7	7	7
By nonrelative	10	3	10
Subtotal	59%	49%	62%
Care in another person's home			
By relative	5%	5%	2%
By nonrelative	13	17	10
Subtotal	18%	22%	12%
Other arrangements			
Public-group day care	0%	2%	0%
Private-group day care	4	8	2
Public- or private-group day care with another means	2	3	6
Child cares for self	1	6	0
Mother cares for child at work	7	8	7
Mother cares for child after school	2	0	4
Other means or combination	6	3	8
Subtotal	22%	30%	27%
Total†	100%	100%	100%

*Respondents interviewed in 1967, 1969, and 1971, who were in the labor force in 1971.

†Totals may not add because of rounding.

TABLE 76

DAY-CARE ARRANGEMENTS FOR CHILDREN UNDER AGE SIX FOR 1965 AND 1971, BY RACE[15]

Day-Care Arrangements	1965		1971	
	Whites	Nonwhites	Whites	Nonwhites
Care in own home				
By father	16%	9%	15%	9%
By other relative	15	28	17	25
By combination of family and nonfamily members	--	--	17	15
By nonrelative	17	7	7	12
Subtotal	48%	44%	56%	61%
Care in another person's home				
By relative	13%	24%	4%	9%
By nonrelative	15	18	14	8
Subtotal	28%	42%	18%	17%
Other arrangements				
Care in group care center	6%	6%	8%	15%
Child cares for self	1	0	3	0
Mother cares for child at work	16	9	7	4
Mother cares for child after school	1	1	1	2
Other	0	0	8	2
Subtotal	24%	16%	26%	23%
Total*	100%	100%	100%	100%

*Totals may not add because of rounding.

- The growth of flex time and other alternative work scheoules may reduce the demand for child care services by giving more conveniently allocated discretionary time to parents.

Social Psychological Effects

Several independent lines of evidence moderate enthusiasm for extended child and day care services in institutional settings be moderated by the major unknown, uncertain, questionable, or even adverse effects on the child suggested by current knowledge

Effects on the social and intellectual development of the child are the subject of a recent National Research Council report. Toward a National Policy for Children and Families. It summarizes research on the effects of day care on child development. In general, that report written by Professor Brofenbrenner, points out that:[16]

> ...taken as whole the findings on the influence of type of care on intellectual development are essentially negative but, again, must be interpreted with several important qualifications. First, the results are based on only a few studies. Second, the day care centers represented only are small in number and of high quality. Third, and most serious, the available data on possible long-range effects are limited to a single study with the single measure (I.Q.) based on the sample of only eleven pairs of children and providing information only through the fifth year of life. It may be that the type of child care does make some difference in other aspects of cognitive development or the defects do not become apparent until the child entered school. We do not and will not know the significance of types of care on cognitive development until follow-up studies are carried out.

Further points along this line will be made below in relation to the works Zajonc.

With regard to the emotional effects on the child, Bronfenbrenner continues, "...just as the existing data do not warrant regarding day care as an emotionally harmful experience, they do not rule out the risk of some negative effects." 17

With regard to the effects of motivation and social behavior, ..."early day care experience may not adversely effect adjustment with peers but may slow acquisition of some adult cultural value." Quoting from works of two other investigators, Bronfenbrenner reports that "...compared with home-reared children, three to four year olds, who have been in all-day care groups for most of their lives, spent more time in large muscle activity areas of the center and less time in expressive and cognitive areas." 18

These guarded and cautionary reviews of day care should further be examined against the evidence that communal systems of child care may produce different personality characteristcs. As noted in a recent report by the Association of American Colleges: 19

> .....More studies of child care in China, Israel, and Russia are needed to see how children raised in infant centers developed. as compared to those raised in the family. If government policy encourages the establishment of child-care centers, what are the best arrangements of such centers? What are the advantages and disadvantages of the collective versus home care? What does each plan offer to the woman who does or does not want to work? It must be recognized that the women are the key to preschool socialization, so the whole question is inextricably entwined with the issue of whether, when, and where mothers work.

The question of whether expanding child-care services should be limited or should principally serve the needs of working women is an open question, since it may very well be to society's advantage to expand such services to women who are not working but have other alternative time-consuming activities.

Zajonc of the University of Michigan has been engaged for several years in studying relationships between birth order, family size, and intelligence. His work raises questions as to whether it is sound public policy to encourage the aggregation of large numbers of children with each other for extended periods of time. The cautionary implicit in his work is of such commanding importance that it must not be overlooked in framing future public policy on child care.

Figure 74 compares the situation in several nations, the Netherlands, United States, France, Scotland on the relationship between intellectual performance and birth order, and family size. The same trend, a negative relationship between birth order and intellectual performance, is shown in each case.

Zajonc has shown that intellectual performance increases as family size goes down. More specifically, it increases with delays between the births of children. His theory is that the larger family offers an average lower quality intellectual environment. Therefore, an average child in a large family has a less stimulating intellectual environment than his counterpart in a small family.

Figures 75 and 76:

> ...plot intellectual performance scores against the average order of births. Average order of births for a given year is calculated from the census data and it is a rather simple index of family configuration for a given cohort. Each year a large number of children are born. Some of these children are first children of the given mother, some are second, others third, etc. Thus, for each year we can readily calculate the average position in the family of the children born that year. If this value is 3.00, for example, this means that the children born that year were on the average third children of their mothers. If it is 2.00, they were on the average second children. If you now look at the data in Figure 76, for example, it is an inescapable conclusion that children born in the 50's (and taking their SAT's in the late 60's), were coming into families that had fewer previous offspring than children born in the 60's (and taking their SAT's now). Of course, we do not know to what extent there were further births in the families for all these cohorts, but note that a child born in 1947 was on the average 2.4th whereas a child born in 1962 was on the average 3.00rd.* [20]

Zajonc's data indicates that one may anticipate that the present decline in SAT scores will stop and turn around even if nothing else changes (Figure 76).

Since the average family size is changing, if Zajonc's theory is correct, there are implications for the growing tendency toward nursery schools. The same argument that argues that the decline in test scores is associated with children being in too much contact with children, would argue that the growth of nursery schools, and day care, will have an adverse affect on the intellectual development of children in such a system.

The basic argument is that children in the company of other children are less intellectually stimulated than they are in the presence of adults or older children. Consequently, public policies which would put large numbers of young children in conjunction with each other for relatively extended periods, would be putting them in a less intellectually stimulating environment than one populated by adults.

The work of Zajonc is by no means above criticism. For example, it is the case that the average size of families headed by women increased in the 1950's in the United States, but the average sib-ship, that is, the number of children in the average family, declined. Basically, more women were having children, but the number of children per family has declined. Further study of this relationship to Zajonc's concept could be useful.

Zajonc's analysis has not held the educational level of the mother constant yet we know this is a key variable in achievement.[21] He points out however, that:

> ...the negative effects of family size occur within all socio-economic levels. John Claudy has recently found the identical pattern with 81,175 twelfth graders tested by TALENT ...(Figure 77). It is well-known that IQ in the mother varies quite substantially with her SES, and if the negative family size effects were merely a reflection of less intelligent mothers having larger families, the parallel trends for all SES levels would not have been found.[22]

Other relationships are suggested by Zajonc and his associate's research on the influence of children on the intellectual environment. The intellectual development of children suggests that women's entry into the labor force correlates highly with delays in marriage and with delays in childbearing. The work in Aberdeen, cited earlier in this paper, shows that intelligence increases with the age of the mother. It may be because better educated women delay marriage and delay having families.

The effect which seems to be independent of birth order is not well understood. A second element coming out of a comprehensive review of the literature on parental absence shows an intelligence decline even when the absence is for a relatively short time.[23] This research suggests strong implications for compensatory education and services at the elementary and secondary school level.

Again in the period of declining enrollments, the suggestion of peer teaching, of student teaching student, comes forward. The data to date suggests that children may benefit by being taught by peers. More important and more real is that children benefit from teaching other children. While it may be a little too late to resurrect the little red school house with its each-one-teach-one environment, it may not be unreasonable to consider modifying school practices to permit older, more advanced or more knowledgeable students to tutor the less advanced.[24]

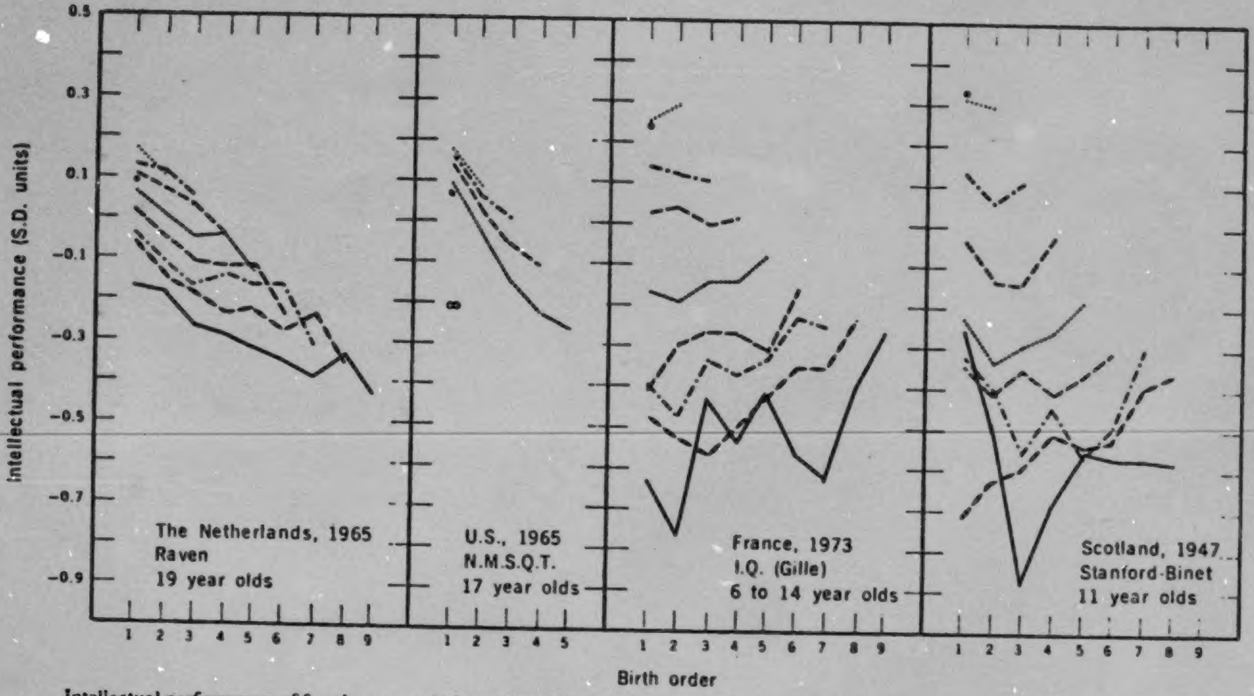
B. Adults as a School Market

A second major, new clientele for declining school systems may be adults with a latent demand for educational assistance. While the day care function largely focuses on elementary school and junior high school use, the needs of adults may best be met by the physical facilities, if not the teaching staff, of high schools.

Several factors may influence the demand for adult education in the future:

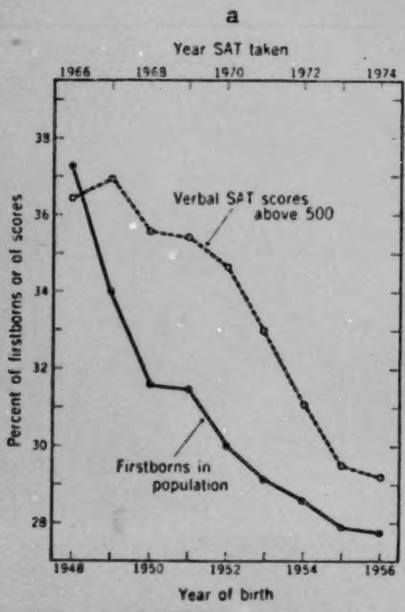
- o As the baby boom bulge matures, there will be an increase in the proportion of middle-aged and elderly. That may have several effects:

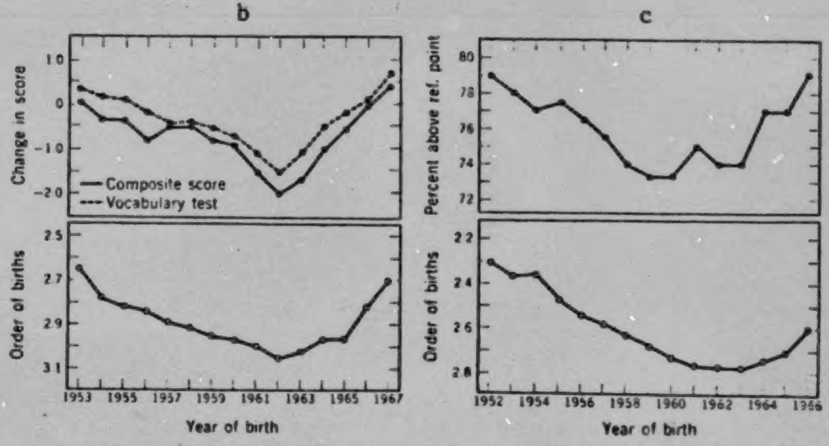
FIGURE 74



Intellectual performance of four large populations, plotted as function of birth order and family size. Separate curves in each graph represent different family sizes, which can be read from the last birth order on each curve. Solid circles represent only children. The double open circle in the U.S. data represents twins. The years show when data were collected. The means of the Dutch, American, French, and Scottish data sets are 2.82, 102.5, 99.2, and 36.74 respectively. The corresponding standard deviations are 1.43, 21.25, 14.53, and 16.10.[25]

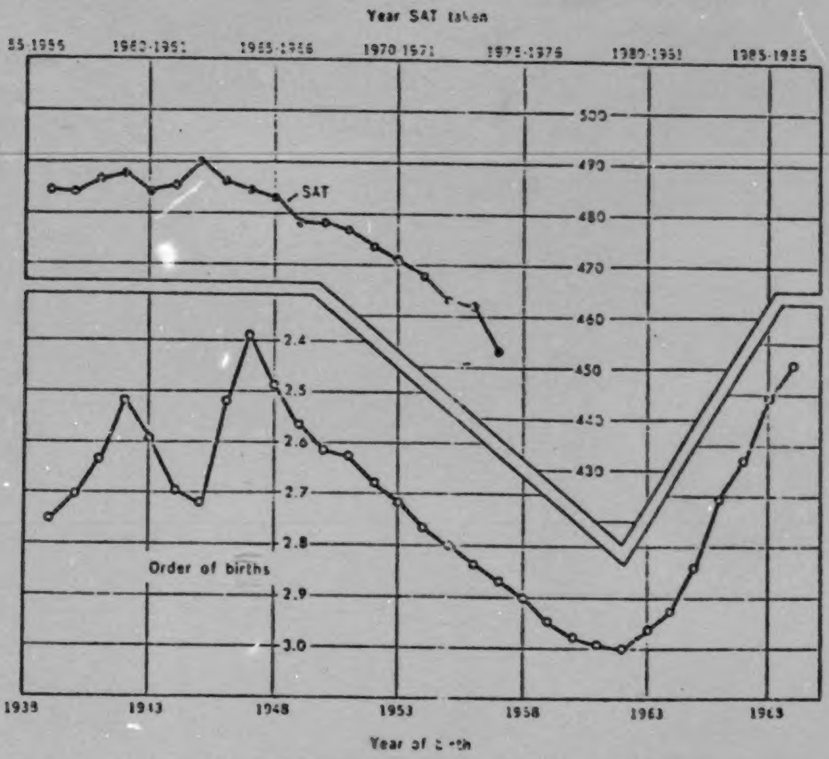
FIGURE 75





a. Percentage of SAT scores above 500, 1966 to 1974, and percentage of firstborns in the corresponding cohorts. b. Average order of live births in Iowa, 1953 to 1967, and changes in Iowa Basic Skills scores of these cohorts (grades 3 to 8). In the Iowa Basic Skills Testing Program 1965 was designated as the base year, and all scores are reported as deviations from the 1965 average score (*46*). c. Average order of live births in New York State, 1952 to 1966, and percent of third-, sixth-, and ninth-grade pupils who surpassed 1966 reference point in reading skill.[21]

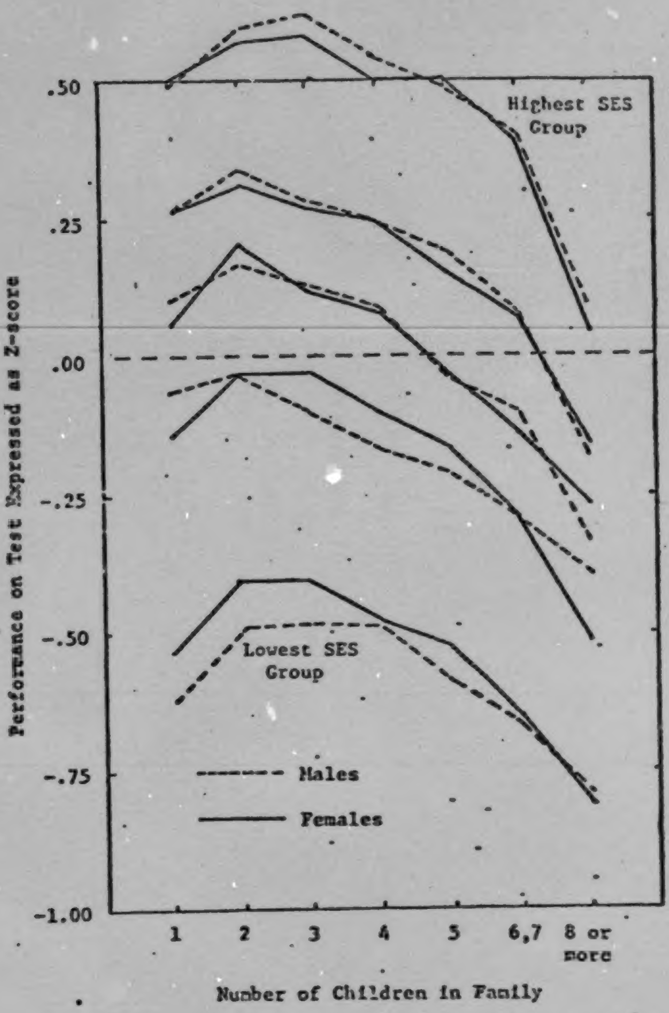
FIGURE 76



Average order of live births in the United States, 1939 to 1969, and average SAT scores for the first 18 cohorts. Future SAT averages are predicted to lie within the shaded area.[27]

FIGURE 77

IQ Composite Performance as a function of Family Size and Socioeconomic Status[28]



  - Shifts in mandatory retirement requirements to older ages to meet labor-force needs.
  - Longer time spent in the work force may extend the mid-career concept from the 40's to the 50's. This could have implications for the school systems by creating a new market for retraining a large middle age cohort.

o The interesting response to the aging of the baby bulge is that in 1985-95, the baby boom kids born in the 1950's and 1960's will be entering the 35 to 45 years old age category which in present day terms is a period in which there is a substantially renewed interest in career changes. This may fit in nicely with alternative uses for school facilities, although in fact it may be coinciding with an increase in school-age children entry into elementary school. It should, however, nicely fit the decline in high school enrollments.

o Adults throughout their lives spend a great deal of time teaching themselves. The work of Allen Tough of Canada shows a substantial portion of the adult population engages in major self-generated learning activities.[29] He finds, for example, that over the course of a year, the population engages in an average of eight separate learning activities, some 70 percent of which are self-directed. The projects involved an average expenditure of 700-800 hours. Whether this could be a significant potential market for underutilized schools and redundant school teachers merits further examination.

The minimum need which schools could meet would be providing physical facilities for teachers, self-teachers and learners to get together on their own terms. The next step might be to provide some teachers to meet the latent demand while exercising some quality control over their ability.

Obviously the program could reach any degree of aggressive elaboration, from formal classroom work to major adult extension. In the latter case, one might consider bringing in regional experts under sponsorship, or going out into the home or other locations to teach and demonstrate.

Since very little is known about the true potential of the adult market, there seem to be substantial opportunities for exploring along the lines of Alan Tough's research and for the very judicious demonstrations over a wide-range of services, to determine the best strategies, if any, for developing this market.

Other factors stimulating adult interest include the permanent upward shift in the price of petroleum with all of the associated desire to economize by making appropriate changes in our homes, appliances, automobiles, and other artifacts. Adults require knowledge and training to make these changes on their own.

These adult learning demands, latent and overt, framed around hobbies, recreation and economic training not associated with careers, ought not be confused with the well-recognized markets for career training and other credentials, such as completion of high school. Any movement by high schools in this new direction could put them in some competition for the same clientele with local institutions of higher learning, especially the junior and community colleges.

The expansion of services as an alternative is, of course, also attractive to administrators because it uses the available facilites and the surplus qualified labor. Expanded services in the form of wider curricular diversity, longer school hours, as well as expanded differentiated services to the bright, to the handicapped and catch-up studies for the bilingual, the multicultural and the deprived are other likely alternatives.

IX. SOME DATA ON SCHOOLS AND STUDENTS

A large body of data is available on schools, students and teachers, particularly as presented in the annual series, "The Condition of Education," a statistical report produced by the National Center for Educational Statistics. This section will present only minimum background material largely drawn from that statistical guide. Additional demographic material germane to the themes of this paper are also presented.

A. Observations

Two key observations to educational planning come out of these data that are crucial:

- The 187 largest school systems enrolled some 27.3 of all students. The top 734 school systems, that is, those of 10,000 or more students, enrolled 45.5 percent of students. From one point of view, focused attention to their problems may involve a set of public strategies different from that for the large number of small school systems making up the total of 16,006 operating systems.
- When one compares enrollments in the ten largest cities against those of the 50 states, the ten largest cities themselves rank as major educational entities. They are 15th, 28th, 31st, 41st, 43rd, 44th, 48th, 51st, 53rd, and 56th in size. The enrollment of New York City, for example, exceeds that of 36 states.

B. The Data

A summary of the expenditures for elementary and secondary schools are displayed in Figures 78, 79 and 80.

> Since 1960, the total expenditures for the elementary and secondary school system reached $81.9 billion; 8 percent coming from Federal sources, 38 percent from state, 42 percent from local and 11 percent from others.

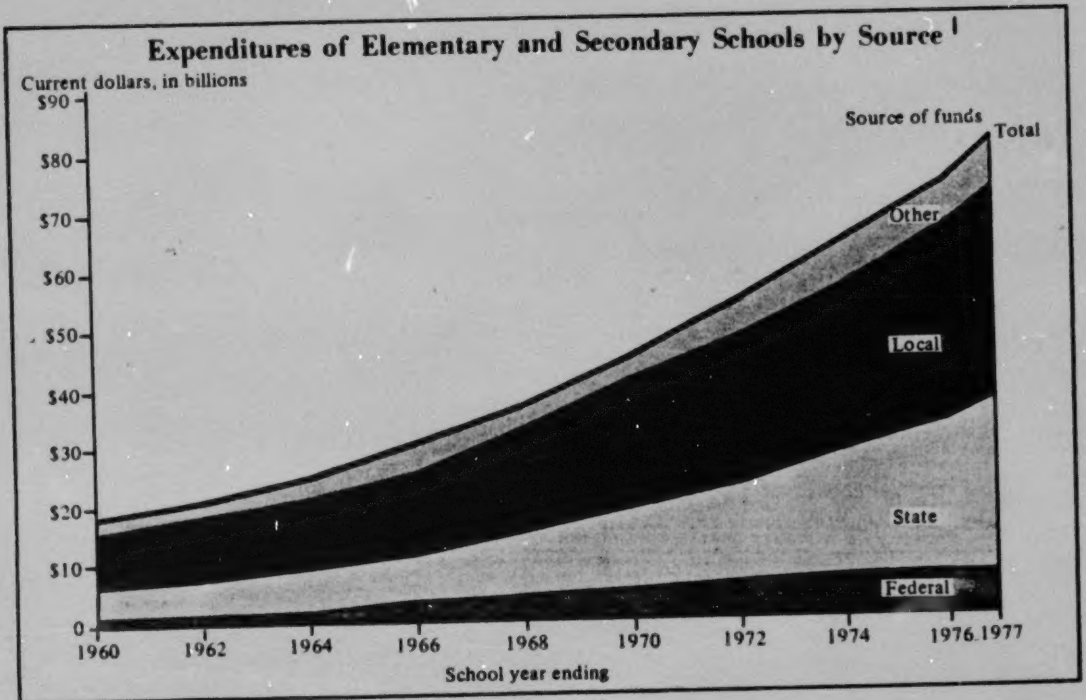
Current expenditures, as shown in Figure 78, far exceed capital outlays or interest. Current expenditures alone are expected to increase to $83.2 billion, in constant 1975-76 dollars, by 1980 with a small decline in capital outlay and interest holding steady (Figure 79).

The current cost per pupil now runs to $1388 and, at least, by one extrapolation in cost and dollars, by 1980 will reach $1665 per pupil (Figure 80).

There are, as of 1975, some 44,700,000 students in public schools throughout the United States (Table 77).

Those students are overwhelmingly clustered in the largest school systems. Table 78 shows that the ten largest cities themselves rank as 15th, 28th, 31st, 41st, 43rd, 44th, 48th, 51st, 53rd, and 56th, as independent educational entities when one compares the

FIGURE 78



Source of Data: National Center for Education Statistics

FIGURE 79

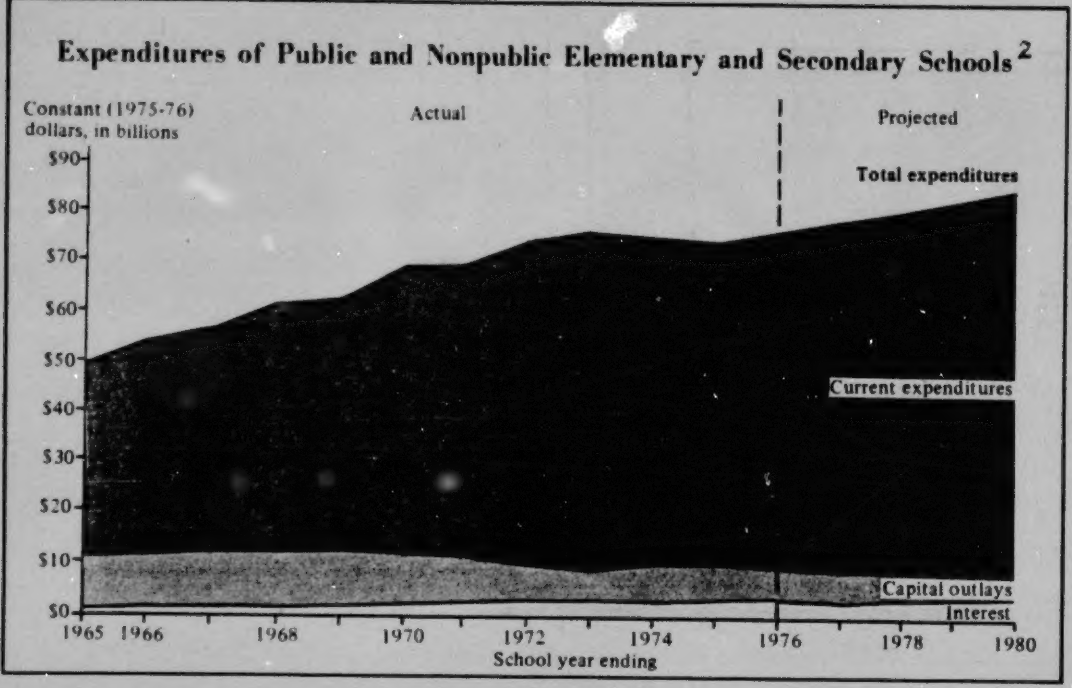

Expenditures of Public and Nonpublic Elementary and Secondary Schools 2
Constant (1975-76) dollars, in billions
Actual
Projected
Total expenditures
Current expenditures
Capital outlays
Interest
$90
$80
$70
$60
$50
$40
$30
$20
$10
$0
1965
1966
1968
1970
1972
1974
1976
1978
1980
School year ending

FIGURE 80

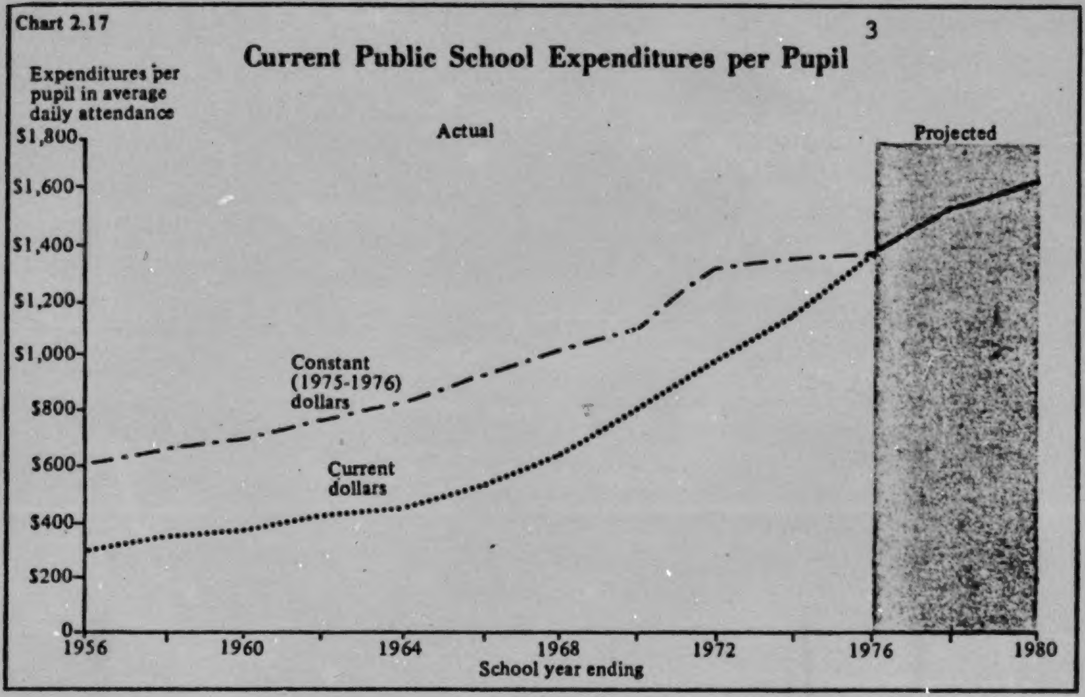


Chart 2.17

3

Current Public School Expenditures per Pupil

TABLE 77

Number of Public School Pupils, by State[4]

State or other area	Fall, 1962	Fall, 1964	Fall, 1966	Fall, 1968	Fall, 1970	Fall, 1972	Fall, 1974	Fall, 1975[1]
Total United States	38,837	41,416	43,055	44,962	45,903	45,753	45,056	44,700
Alabama	812	821	873	832	805	733	764	757
Alaska	50	56	62	72	80	85	87	86
Arizona	353	366	383	411	440	485	487	483
Arkansas	436	448	451	453	463	461	455	451
California	3,755	4,140	358	4,582	4,633	4,501	4,428	4,394
Colorado	438	476	499	524	550	574	568	563
Connecticut	520	560	597	632	662	665	660	655
Deleware	92	105	113	125	133	134	131	129
District of Columbia	133	141	147	149	146	140	132	130
Florida	1,094	1,184	1,260	1,356	1,428	1,514	1,557	1,544
Georgia	991	1,042	1,074	1,103	1,099	1,090	1,082	1,072
Hawaii	152	158	166	172	181	182	177	175
Idaho	167	173	175	179	182	185	188	186
Illinois	1,890	2,043	2,159	2,274	2,357	2,349	2,296	2,278
Indiana	1,029	1,100	1,155	1,205	1,232	1,221	1,187	1,177
Iowa	598	620	636	658	660	646	618	616
Kansas	502	506	516	522	512	475	450	446
Kentucky	647	663	675	699	717	715	701	695
Louisiana	760	786	821	865	842	846	841	833
Maine	213	218	222	232	245	250	251	248
Maryland	668	736	741	859	916	921	894	887
Massachusetts	943	993	1,083	1,113	1,168	1,203	1,200	1,200
Michigan	1,792	1,919	2,015	2,124	2,181	2,198	2,138	2,121
Minnesota	733	788	835	895	921	910	890	884
Mississippi	563	579	581	582	534	526	514	509
Missouri	858	948	964	1,056	1,040	1,030	1,002	994
Montana	157	165	168	173	177	180	172	171
Nebraska	301	317	319	329	329	329	319	316
Nevada	80	100	103	118	128	132	137	136
New Hampshire	116	125	134	146	159	168	172	171
New Jersey	1,159	1,255	1,326	1,422	1,482	1,510	1,470	1,458
New Mexico	239	260	271	273	281	285	282	280
New York	2,943	3,130	3,249	3,411	3,477	3,524	3,436	3,411
North Carolina	1,140	1,179	1,184	1,195	1,192	1,161	1,178	1,169
North Dakota	142	148	148	149	147	142	133	132
Ohio	2,082	2,230	2,320	2,384	2,426	2,423	2,330	2,314
Oklahoma	563	600	598	604	627	607	596	591
Oregon	413	441	474	490	480	472	477	473
Pennsylvania	2,059	2,212	2,211	2,310	2,358	2,361	2,278	2,261
Rhode Island	143	151	160	173	188	190	179	177
South Carolina	611	633	642	649	638	624	627	622
South Dakota	160	164	168	167	166	162	154	153
Tennessee	838	864	874	884	900	892	873	865
Texas	2,291	2,464	2,563	2,704	2,840	2,738	2,785	2,762
Utah	258	283	292	301	304	306	306	304
Vermont	78	82	88	100	103	107	105	104
Virginia	906	969	1,003	1,056	1,079	1,069	1,073	1,081
Washington	685	719	753	804	818	791	786	779
West Virginia	436	436	421	410	400	410	404	401
Wisconsin	767	831	890	954	994	995	974	963
Wyoming	83	88	85	86	87	86	87	85
Outlying areas:	634	662	701	711	734	780	786	783
American Samoa	6	7	8	8	9	8	10	10
Canal Zone	13	13	13	14	13	13	11	11
Guam	15	16	18	21	25	27	28	28
Puerto Rico	592	618	651	668	687	711	713	710
Virgin Islands	8	9	11	–	–	21	23	24

[1] Estimated.

NOTE.–State and area figures may not add up to total figures because of rounding.

TABLE 78

Public Elementary and Secondary School Enrollment in States and Large Cities[5]

States and large cities, ranked by enrollment	Rank	Enrollment in Fall 1975
California.	1	4,419,571
New York	2	3,401,214
Texas	3	2,812,888
Ohio	4	2,292,647
Illinois.	5	2,269,892
Pennsylvania.	6	2,246,218
Michigan	7	2,073,288
Florida	8	1,551,373
New Jersey.	9	1,458,000
Indiana	10	1,226,208
Massachusetts	11	1,198,410
North Carolina	12	1,184,996
Virginia	13	1,103,669
Georgia	14	1,090,292
New York City, N.Y. . . .	15	1,085,807
Missouri.	16	965,360
Wisconsin.	17	964,219
Maryland	18	880,927
Minnesota	19	879,944
Tennessee	20	876,926
Lousiana	21	847,202
Washington	22	785,449
Alabama	23	759,346
Kentucky.	24	691,612
Connecticut	25	652,449
South Carolina	26	629,729
Iowa	27	612,111
Los Angeles, Calif.	28	608,998
Oklahoma	29	594,816
Colorada	30	569.128
Chicago, Ill.	31	526,716
Mississippi	32	512,407
Arizona	33	492,995
Oregon	34	477,559
Arkansas	35	456,703
Kansas.	36	448,064
West Virginia	37	404,119
Nebraska	38	315,669
Utah	39	309,708
New Mexico	40	274,612
Philadelphia, Pa.	41	265,674
Maine	42	250,931
Detroit, Mich.	43	248,007
Houston, Tex.	44	208,681
Idaho	45	196,616
Hawaii.	46	176,430
Rhode Island	47	176,317
Phoenix, Ariz.	48	175,111
New Hampshire.	49	174,597
Montana	50	171,788
Baltimore, Md.	51	166,370
South Dakota	52	151,217
Dallas, Tex.	53	151,187
Nevada	54	139,745
North Dakota	55	131,331
Washington, D.C.	56	129,969
Delaware	57	127,476
Vermont	58	104,874
Alaska.	59	89,295
Wyoming.	60	88,184

ten largest cities and the 50 states by enrollment. The enrollment of New York City for example exceeds that of 36 states.

The same data presented regionally by state in Table 79 gives a closer look at the distribution since 1962. Tables 80 and 81 compare 1965 and 1975 of the largest state systems.

California, enrolls approximately 10 percent of the students, New York 7.6 percent, and about 5 percent each are enrolled by Illinois, Michigan, Ohio, Pennsylvania and Texas. The very largest municiple systems--New York, Los Angeles and Chicago, in 1975, respectively enrolled 2.42, 1.36 and 1.17 percent of all students. The fifteen largest school systems together enrolled 8.87 percent of all students (Table 81).

The top 187 school districts, in 1975, each of which contained 25,000 or more students, enrolled 27.3 percent of all students. The top 735 school districts, that is those with 10,000 or more students, enrolled 45.5 percent of all students (Table 82).

The extent of this aggregation and the prominence of the first 187 and first 735 school systems are not surprising when one looks at the enormous rate of consolidation of the school system. In 1959-60, there were 40,500 school systems, and in 1975-76, there were 16,300. In recent years the most extensive degree of consolidation has been in the central regions. The West, Northeast, and Southeast have been stable since about 1966 (Figures 81 and 82).

TABLE 79

Elementary and Secondary Public School Enrollment, by State [6]

State or other area	Fall 1962	Fall 1964	Fall 1966	Fall 1968	Fall 1970	Fall 1972	Fall 1974	Fall 1975
				(In thousands)				
United States	38,837	41,416	43,055	44,962	45,903	45,753	45,056	44,838
Northeastern Region	8,174	8,726	9,070	9,537	9,842	9,978	9,760	9,662
New England	2,013	2,129	2,284	2,393	2,525	2,583	2,577	2,557
Maine	213	218	222	232	245	250	251	251
New Hampshire	116	125	134	146	159	168	172	175
Vermont	78	82	88	100	103	107	105	105
Massachusetts	943	993	1,053	1,112	1,168	1,203	1,210	1,198
Rhode Island	143	151	160	173	188	190	179	176
Connecticut	520	560	597	632	662	665	660	652
Middle Atlantic	6,161	6,597	6,786	7,142	7,317	7,395	7,183	7,105
New York	2,943	3,130	3,249	3,411	3,477	3,524	3,436	3,401
New Jersey	1,159	1,255	1,326	1,421	1,482	1,510	1,470	1,458
Pennsylvania	2,059	2,212	2,211	2,310	2,358	2,361	2,277	2,246
North Central Region	10,854	11,614	12,125	12,717	12,963	12,880	12,490	12,329
East North Central	7,560	8,123	8,539	8,941	9,189	9,186	8,925	8,826
Ohio	2,052	2,230	2,320	2,384	2,426	2,423	2,330	2,293
Indiana	1,029	1,100	1,155	1,205	1,231	1,221	1,187	1,226
Illinois	1,890	2,043	2,159	2,274	2,357	2,349	2,296	2,270
Michigan	1,792	1,919	2,015	2,124	2,181	2,198	2,138	2,073
Wisconsin	767	831	890	954	994	995	974	964
West North Central	3,294	3,491	3,586	3,776	3,774	3,694	3,565	3,503
Minnesota	733	788	835	895	921	910	890	850
Iowa	598	620	636	658	660	646	617	612
Missouri	858	948	964	1,056	1,039	1,030	1,002	965
North Dakota	142	146	148	149	147	142	133	131
South Dakota	160	164	168	167	166	162	154	151
Nebraska	301	317	319	329	329	329	319	316
Kansas	502	506	516	522	512	475	450	448
Southern Region	12,981	13,650	14,069	14,525	14,759	14,631	14,624	14,654
South Atlantic	6,071	6,425	6,635	6,902	7,031	7,063	7,097	7,102
Delaware	92	105	113	125	133	134	131	127
Maryland	668	736	791	859	916	921	894	881
District of Columbia	133	141	147	149	146	140	132	130
Virginia	906	969	1,003	1,056	1,079	1,069	1,093	1,104
West Virginia	436	436	421	410	400	410	404	404
North Carolina	1,140	1,179	1,184	1,195	1,192	1,161	1,178	1,185
South Carolina	611	633	642	649	638	624	627	630
Georgia	991	1,042	1,074	1,103	1,099	1,090	1,081	1,090
Florida	1,094	1,184	1,260	1,356	1,428	1,514	1,557	1,551
East South Central	2,860	2,927	3,001	2,997	2,956	2,916	2,851	2,840
Kentucky	647	663	674	699	717	715	701	692
Tennessee	838	864	874	884	900	892	873	877
Alabama	812	821	873	832	805	783	764	759
Mississippi	563	579	580	582	534	526	513	512
West South Central	4,050	4,298	4,433	4,626	4,772	4,652	4,676	4,712
Arkansas	436	448	451	453	463	461	454	457
Louisiana	760	786	821	865	842	846	841	847
Oklahoma	563	600	598	604	627	607	596	595
Texas	2,291	2,464	2,563	2,704	2,840	2,738	2,785	2,813
Western Region	6,830	7,425	7,794	8,184	8,341	8,263	8,180	8,192
Mountain	1,775	1,911	1,981	2,065	2,149	2,233	2,227	2,244
Montana	157	165	168	173	177	180	172	172
Idaho	167	173	175	179	182	185	188	197
Wyoming	83	88	85	86	87	86	87	88
Colorado	438	476	499	524	550	574	568	569
New Mexico	239	260	271	273	281	285	282	275
Arizona	353	366	383	411	440	485	487	493
Utah	258	283	292	301	304	306	306	310
Nevada	80	100	108	118	128	132	137	140
Pacific	5,055	5,514	5,813	6,119	6,192	6,030	5,953	5,948
Washington	685	719	753	804	818	791	785	785
Oregon	413	441	474	490	480	471	477	478
California	3,755	4,140	4,358	4,582	4,633	4,501	4,427	4,420
Alaska	50	56	62	71	80	85	87	89
Hawaii	152	158	166	172	181	182	177	176
Outlying areas	634	663	701	711	734	780	786	771
American Samoa	6	7	8	8	9	8	10	10
Canal Zone	13	13	13	14	13	13	11	11
Guam	15	16	18	21	25	27	28	29
Puerto Rico	592	618	651	668	687	711	713	697
Virgin Islands	8	9	10	–	–	21	23	24

NOTE.–Bars shaded to peak year of public school enrollment.
–Details may not add to totals because of rounding.

TABLE 80

Full-time enrollment in public elementary and secondary day schools: Fall 1965 and Fall 1975[7]

	1965			1975		
	Fall Enrollment	Percentage Distribution	Rank Order	Fall Enrollment	Percentage Distribution	Rank Order
United States............	42,143,504	100.00		44,838,490	100.00	
Alabama..................	831,701	1.97	18	759,346	1.69	22
Alaska...................	59,727	.14	51	89,295	.20	50
Arizona..................	373,659	.89	34	492,995	1.10	30
Arkansas.................	451,231	1.07	31	456,703	1.02	32
California...............	4,262,000	10.11	1	4,419,571	9.86	1
Colorado.................	486,784	1.16	30	569,128	1.27	28
Connecticut..............	574,798	1.36	28	652,449	1.46	24
Delaware.................	108,357	.26	47	127,476	.28	48
District of Columbia.....	144,016	.34	45	129,969	.29	47
Florida..................	1,220,581	2.90	9	1,551,373	3.46	8
Georgia..................	1,055,086	2.50	12	1,090,292	2.43	14
Hawaii...................	162,200	.38	42	176,430	.39	40
Idaho....................	173,696	.41	39	196,616	.44	39
Illinois.................	2,087,689	4.95	6	2,269,892	5.06	5
Indiana..................	1,124,724	2.67	11	1,226,208	2.73	10
Iowa.....................	625,358	1.48	25	612,111	1.37	26
Kansas...................	506,958	1.20	29	448,064	1.00	33
Kentucky.................	665,046	1.58	23	691,612	1.54	23
Louisiana................	802,592	1.90	20	847,202	1.89	20
Maine....................	222,506	.53	38	250,931	.56	38
Maryland.................	762,647	1.81	21	880,927	1.96	17
Massachusetts............	1,020,500	2.42	13	1,198,410	2.67	11
Michigan.................	1,975,000	4.69	7	2,073,288	4.62	7
Minnesota................	808,207	1.92	19	879,944	1.96	18
Mississippi..............	584,629	1.39	26	512,407	1.14	29
Missouri.................	964,351	2.29	15	965,360	2.15	15
Montana..................	166,765	.40	40	171,788	.38	43
Nebraska.................	318,746	.76	35	315,669	.70	35
Nevada...................	105,952	.25	48	139,745	.31	45
New Hampshire............	128,857	.31	46	174,597	.39	42
New Jersey...............	1,286,000	3.05	8	1,458,000	3.25	9
New Mexico...............	267,700	.64	37	274,612	.61	37
New York.................	3,190,845	7.57	2	3,401,214	7.59	2
North Carolina...........	1,181,558	2.80	10	1,184,996	2.64	12
North Dakota.............	148,871	.35	44	131,331	.29	46
Ohio.....................	2,270,108	5.39	4	2,292,647	5.11	4
Oklahoma.................	584,106	1.39	27	594,816	1.33	27
Oregon...................	448,527	1.06	32	447,559	1.00	31
Pennsylvania.............	2,189,829	5.20	5	2,246,218	5.01	6
Rhode Island.............	154,501	.37	43	176,317	.39	41
South Carolina...........	637,990	1.51	24	629,729	1.40	25
South Dakota.............	165,635	.39	41	151,217	.34	44
Tennessee................	871,998	2.07	16	876,926	1.96	19
Texas....................	2,517,342	5.97	3	2,812,888	6.27	3
Utah.....................	286,404	.68	36	309,708	.69	36
Vermont..................	84,254	.20	50	104,874	.23	49
Virginia.................	986,123	2.34	14	1,103,669	2.46	13
Washington...............	723,398	1.72	22	785,449	1.75	21
West Virginia............	428,543	1.02	33	404,119	.90	34
Wisconsin................	859,101	2.04	17	964,219	2.15	16
Wyoming..................	86,308	.20	49	88,184	.20	51

SOURCE: Department of Health, Education, and Welfare, National Center for Education Statistics, *Statistics of Public Schools, Fall 1965* and *Statistics of Public Elementary and Secondary Day Schools, Fall 1975*.

Table 81

Full-time enrollment in public elementary and secondary day schools in major cities: Fall 1965 and Fall 1975[8]

	Fall 1965			Fall 1975		
	Enrollment	Percent of total United States	Rank Order	Rank Order	Enrollment	Percent of total United States
LARGE CITIES:						
Baltimore, Md.......	191,008	.45	7	7	166,370	.37
Boston, Mass........	93,104	.22	15	14	85,070	.19
Chicago, Ill........	542,581	1.29	3	3	526,716	1.17
Cleveland, Ohio.....	152,852	.36	8	10	128,127	.29
Dallas, Texas.......	150,293	.36	9	8	151,187	.34
Detroit, Mich.......	295,177	.70	4	5	248,007	.55
Houston, Texas.....	228,247	.54	6	6	208,681	.47
Los Angeles, Calif..	620,272	1.47	2	2	608,998	1.36
Milwaukee, Wis.....	122,377	.29	11	11	115,676	.26
New Orleans, La.....	106,164	.25	13	12	94,079	.21
New York, N.Y.......	1,075,777	2.55	1	1	1,085,807	2.42
Philadelphia, Pa....	276,347	.66	5	4	265,674	.59
St. Louis, Mo.......	114,884	.27	12	13	87,854	.20
San Francisco, Calif	93,203	.22	14	15	70,133	.16
Washington, D.C.....	144,016	.34	10	9	129,969	.29

SOURCE: Department of Health, Education, and Welfare, National Center for Education Statistics, Statistics of Public Schools, Fall 1965 and Statistics of Public Elementary and Secondary Day Schools, Fall 1975.

FIGURE 81

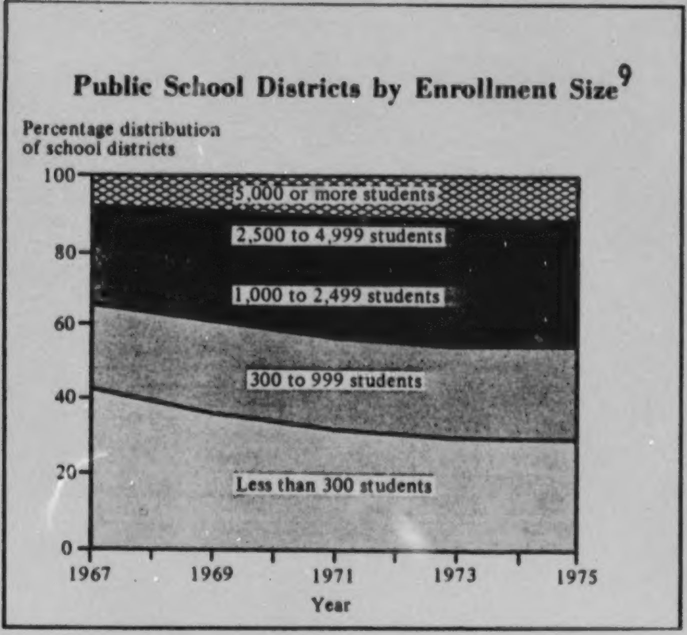


FIGURE 82

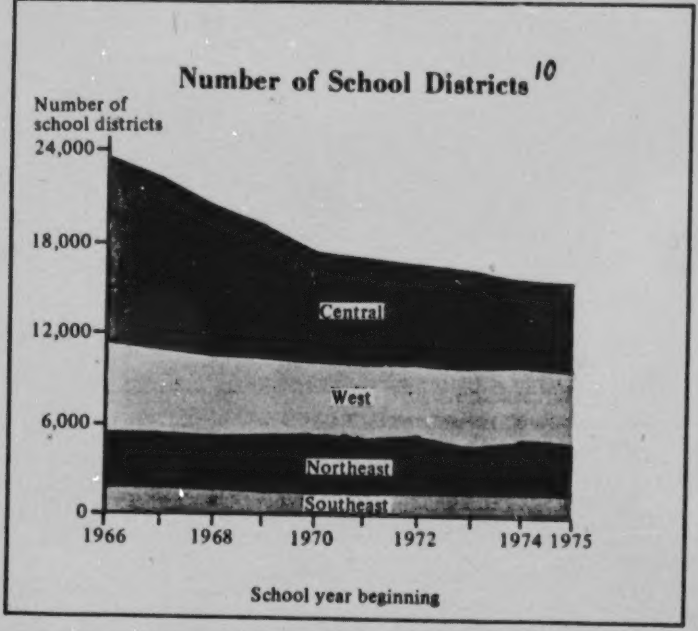


Table 82

Distributions of operating local public school systems and numbers pupils, by size of system: United States, Fall 1967 to Fall 1975[11]

Enrollment Size	1967	1969	1971	1973	1975
Total operating systems	20,255	18,655	16,771	16,338	16,006
25,000 or more students	170	180	184	186	187
10,000 to 24,999 students	529	538	558	562	555
5,000 to 9,999 students	1,083	1,097	1,110	1,146	1,126
2,500 to 4,999 students	1,941	2,026	2,026	2,025	2,050
1,000 to 2,499 students	3,500	3,478	3,506	3,482	3,467
300 to 999 students	4,639	4,446	4,291	4,214	4,157
Less than 300 students	8,393	6,890	5,096	4,723	4,464
		Percentage distribution			
Total operating systems	100.0	100.0	100.0	100.0	100.0
25,000 or more students	0.8	1.0	1.1	1.1	1.2
10,000 to 24,999 students	2.6	2.9	3.3	3.4	3.5
5,000 to 9,999 students	5.4	5.9	6.6	7.0	7.0
2,500 to 4,999 students	9.6	10.9	12.1	12.4	12.8
1,000 to 2,499 students	17.3	18.6	20.9	21.3	21.7
300 to 999 students	23.0	23.8	25.6	25.8	26.0
Less than 300 students	41.4	36.9	30.4	28.9	27.9
Enrollment in operating systems, by systems, size	43,626,594	44,494,621	45,115,164	44,984,957	44,231,874
25,000 or more students	12,539,348	12,992,936	13,247,458	12,939,014	12,533,059
10,000 to 24,999 students	7,744,636	7,887,050	8,198,133	8,267,441	8,070,851
5,000 to 9,999 students	7,450,234	7,631,784	7,725,266	7,952,960	7,820,441
2,500 to 4,999 students	6,752,568	7,065,765	7,096,504	7,070,177	7,153,477
1,000 to 2,499 students	5,677,585	5,649,923	5,741,499	5,726,969	5,682,631
300 to 999 students	2,727,561	2,619,232	2,543,350	2,497,693	2,458,709
Less than 300 students	734,662	647,931	562,954	530,703	512,706
		Percentage distribution			
Enrollment in operating systems, by systems, size	100.0	100.0	100.0	100.0	100.0
25,000 or more students	28.7	29.2	29.4	28.8	27.3
10,000 to 24,999 students	17.7	17.7	18.2	18.4	18.2
5,000 to 9,999 students	17.1	17.2	17.1	17.7	17.7
2,500 to 4,999 students	15.5	15.9	15.7	15.7	16.2
1,000 to 2,499 students	13.0	12.7	12.7	12.7	12.8
300 to 999 students	6.3	5.8	5.6	5.6	5.6
Less than 300 students	1.7	1.5	1.2	1.2	1.2

C. Absentee Rates

An interesting, quantitative measure of student disaffection with school systems is indicated by the relationship between average daily membership enrollment and absentee rates for states and large cities.

The average absentee rate for all states in the United States was 6.9 in 1968-70, and 6.1 in 1975-76. For the fifteen largest cities, the average daily absentee rate was 7.1 in 1969-70 and 10.2 for 1975-76.

This may be a primary measure of the failure of those systems to meet the perceived needs of a large portion of urban students. Whether it is the perceptions of the students, or the performance of the system which should be the primary focus of change is an appropriate subject for study.

D. Dropout Rates

The trend since at least 1967 has been for white drop out rates to remain relatively constant at about 11 percent. The dropout rates for Black students have dropped and is approaching the rate for whites. Clearly this a positive social indicator. However, attention should be given to the possible implications of a relatively constant level of dropout for whites. One hypothesis having significant policy implications and worth exploring is that there is a body of students perhaps around 10 or 11 percent who are not cut out in terms of their aptitudes and ability for the kinds of implicit goals, and functions, of the school system. Consequently, attempts to directly reduce dropout rates may themselves not be in the public interest and not in the interest of the dropout students. Alternative forms of education may be appropriate. This question becomes increasingly pressing when one sees the movement toward an information society making credentials as well as the ability to work with written symbols a key part of our society and its upward economic mobility. To force fit all into that mold may be as serious an error as to fail to fit those who are able.

A recent General Accounting Office report to the Congress raises very salient criticism about the planning, the goals, the evaluation and effectiveness of bilingual education.[12]

Figure 83

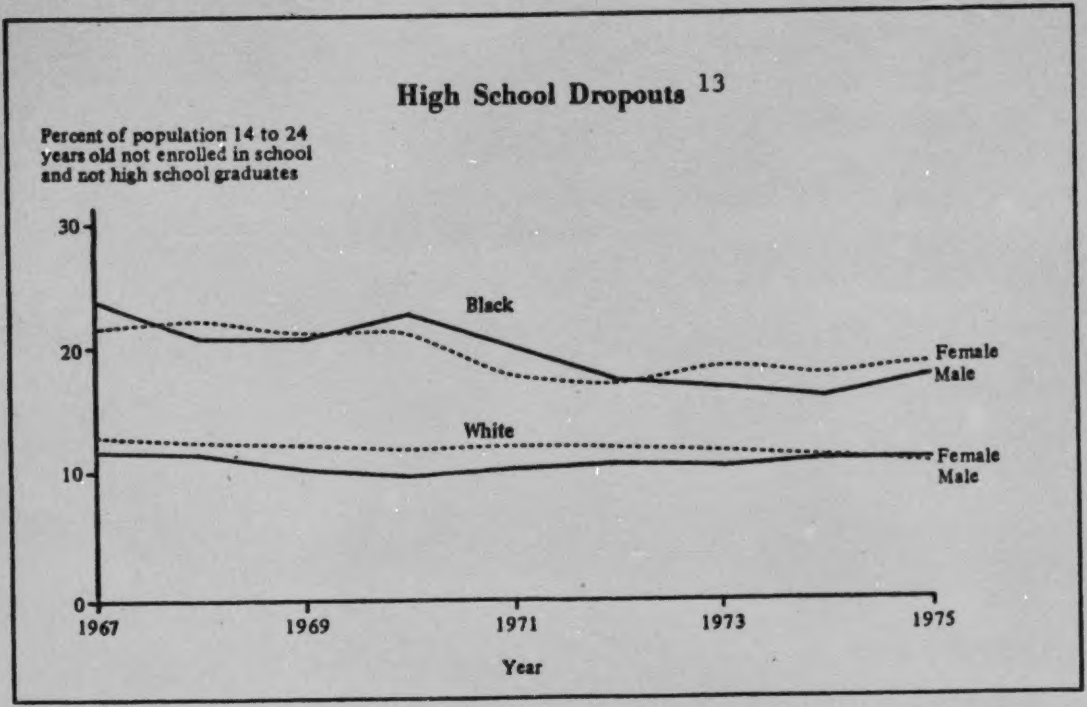

High School Dropouts 13
Percent of population 14 to 24 years old not enrolled in school and not high school graduates
30
20
10
0
Black
Female
Male
White
Female
Male
1967
1969
1971
1973
1975
Year

TABLE 83

Enrollment by Average daily membership and Absentee rate, by State and large city: United States, 1969-70 and 1975-76 [14]

(ADM in thousands)

	1969-70		1975-76	
	Estimated ADM	Absentee Rate	Estimated ADM	Absentee Rate
Totals	44,710	5.39	44,100	6.18
Alabama	814	4.24	752	4.78
Alaska	78	6.07	89	5.42
Arizona	409	6.10	489	6.00
Arkansas	440	5.10	434	5.00
California	4,540	1.21	4,351	1.48
Colorado	533	6.10	551	4.28
Connecticut	640	7.03	651	7.16
Delaware	129	6.00	126	7.16
District of Columbia	154	10.01	128	8.93
Florida	1,402	6.35	1,555	6.00
Georgia	1,107	7.09	1,065	7.12
Hawaii	179	6.19	177	8.30
Idaho	-	-	-	-
Illinois	2,201	5.11	2,233	8.95
Indiana	-	-	1,145	5.79
Iowa	650	3.96	598	5.98
Kansas	-	-	446	6.04
Kentucky	691	5.89	690	6.96
Louisiana	875	7.20	826	8.25
Maine	234	5.56	243	6.38
Maryland	884	8.20	875	9.48
Massachusetts	1,110	6.3	-	-
Michigan	-	-	-	-
Minnesota	911	4.86	880	3.83
Mississippi	573	5.83	507	5.50
Missouri	-	-	-	-
Montana	172	5.36	172	4.95
Nebraska	330	3.70	310	4.92
Nevada	123	6.50	138	7.98
New Hampshire	149	5.66	172	5.99
New Jersey	1,450	6.90	1,442	9.22
New Mexico	276	3.91	275	4.84
New York	3,465	7.00	3,373	9.98
North Carolina	1,175	5.57	1,170	5.00
North Dakota	146	3.6	131	3.31
Ohio	2,417	6.35	2,254	7.00
Oklahoma	583	4.14	585	5.13
Oregon	464	5.86	457	6.80
Pennsylvania	2,305	5.86	2,227	7.63
Rhode Island	174	7.26	168	5.26
South Carolina	643	5.91	628	6.55
South Dakota	166	4.52	150	4.02
Tennessee	883	4.74	878	5.54
Texas	2,595	6.64	2,730	7.16
Utah	301	4.10	308	5.87
Vermont	103	5.00	104	4.00
Virginia	1,057	5.44	1,087	7.18
Washington	-	-	778	6.47
West Virginia	399	5.21	388	5.21
Wisconsin	926	4.76	918	6.19
Wyoming	86	4.65	82	3.72
Guam	22	5.97	28	6.30
Puerto Rico	-	-	716	9.81
Virgin Islands	No report		25	6.61

Table 84

Average daily membership and absentee rates in large city schools: United States 1969-70 and 1975-76[15]

(ADM in thousands)

	1969-1970		1975-1976	
	ADM	Absentee Rate	ADM	Absentee Rate
LARGE CITIES:				
Baltimore, Md........	188	6.90	166	17.02
Boston, Mass.........	100	1.00	-	-
Chicago, Ill.........	549	10.39	526	15.59
Cleveland, Ohio......	147	7.18	122	10.32
Dallas, Texas........	168	10.40	138	4.67
Detroit, Mich........	296	8.00	-	-
Houston, Texas.......	246	7.24	203	5.83
Los Angeles, Calif 1/	644	1.52	594	1.48
Milwaukee, Wis.......	123	6.68	107	11.11
New Orleans, La......	110	11.38	90	13.97
New York, N.Y........	1,123	9.63	1,067	16.77
Philadelphia, Pa.....	287	14.00	263	15.00
St. Louis, Mo........	100	9.50	85	10.49
San Francisco, Calif 1/	91	1.52	68	1.48
Washington, D.C.....	154	10.01	128	8.93

1/ California reports excused absences as attendance.

SOURCE: National Center for Education Statistics, Department of Health, Education, and Welfare, Statistics of Public Elementary and Secondary Day Schools, Fall 1975 and Statistics of Public Schools, Fall 1969.

X. FLIGHT TO THE PRIVATE SCHOOL

At the zenith of private school attendance in 1965-66, some 6,305,000 elementary and secondary students were enrolled in non-public institutions. This fell by a million to 5,330,000 in 1970. On a percentage basis, non-public schools share a drop from 13.6 in 1959-60 to 11.4 percent in 1969-70.

Since the Catholic school system now enrolls some 76 percent of all private school students, a recent study by Erickson, Nault and Cooper for the NIE, points out that whatever happens to that school system easily obscure the more subtle trends.[1] Other sectarian school systems fall in the range from a fraction of one percent to 3.7 percent (for the Missouri Synod, a Lutheran school system) of all non-public schools. The schools affiliated with the National Associated of Independent schools, largely non-sectarian, enrolled 6.2 percent or 277,406 pupils (Table 85) in 1975-76.

If one partitions out, and examines separately the percent change in non-public school enrollment by Roman Catholic and non-Roman Catholic schools with 1965-66 as the base line, it becomes strikingly clear that non-public, non-Catholic enrollment has increased some 40 percent (Figure 84).

A. Implications of the Movement to Private Schools

While the data described below are not compelling, they are certainly suggestive that in school systems with substantial percentages of Black students, that is roughly above 30 percent, there is a tendency on the part of whites to withdraw from the public school system. Since private schooling costs money, this effect is most clearly seen in those families with incomes above $15,000, although the trend is also clear in families earning between $10,000 and $15,000. Since families in the higher income group have the greatest number of options open to them, their behavior is important on two grounds. First, it may be a model for the behavior of less prosperous families whose options may not include enrollment in private schools, but rather, movement to other neighborhoods, suburban communities, or other regions.

Second, the removal of a substantial portion of the prosperous middle class from the school system, could have a direct effect of subverting the democratic objectives of school systems through egalitarian participation. It may have the indirect effect of producing further resistance to appropriate funding of services for already troubled students in already troubled systems. The net effect could be not just ghetto schools but ghetto school systems.

B. Catholic Schools

Before returning to the expansion in non-Catholic private school enrollment, it would be useful to review Erickson's conclusions on why Catholic schools have gone into numerical decline.[2] These include:

- Massive fiscal shock since the contributed service of nuns, priests, and brothers was drastically diminished and the cost of lay teachers increased three-or four-fold. No other non-public

TABLE 85

Proportion of total U.S. nonpublic school enrollment accounted for by major nonpublic school groups, 1975-76[3]

Nonpublic School Group	Enrollment 1975-76	Percentage of Total
1. Roman Catholic Schools	3,415,000	75.9
2. Lutheran Schools		
a. Missouri Synod	165,604	3.7
b. American Lutheran	16,121	0.4
c. Wisconsin Synod	31,183	0.7
3. Seventh Day Adventist Schools	75,722[a]	1.7
4. Calvinist Schools (National Union of Christian Schools)	48,585	1.1
5. Evangelical Schools		
a. National Association of Christian Schools	23,185	0.5
b. Western Association of Christian Schools	63,131	1.4
c. National Christian School Education Association	38,175	0.8
d. Assembly of God Christian Day Schools	21,921	0.5
c. American Association of Christian Schools	94,722	2.1
6. Jewish Day Schools		
a. National Society for Hebrew Day Schools (Orthodox)	82,200	1.8
b. Solomon Schechter Day Schools (Conservative)	7,965	0.2
c. Reform Jewish	373	0.01
7. National Association of Independent Schools	277,406	6.2
8. Episcopal		
a. Parish Day Schools	5,536	0.1
b. Nonparish Schools	71,020	1.6
9. Friends (Quaker) Schools	13,801	0.3
10. Military Schools	13,600	0.3
11. Greek Orthodox Schools	5,009	0.1
12. Mennonite Schools	8,079	0.2
13. Nonpublic Alternative (Free) Schools	23,498	0.5
TOTAL Enrollments Reported	4,501,836	100.11[b]

school group faced the massive city to suburb migration as the Catholics have recently undergone.

- The church leaders have not replaced the old city with new suburban schools, hence a student can hardly attend a non-existent school.
- There is a rapid shift in the philosophical outlook of Catholics since the Second Vatican Council.

Erickson et. al. conclude that disaffection with recent developments in public schools have reached the stage where it is difficult to escape the conclusion that "...public disenchantment with public schools is reaching serious proportions, particularly in some parts of the country." They earmark the deep south, Florida and the Southwest, where public disfavor has been most clearly visible.

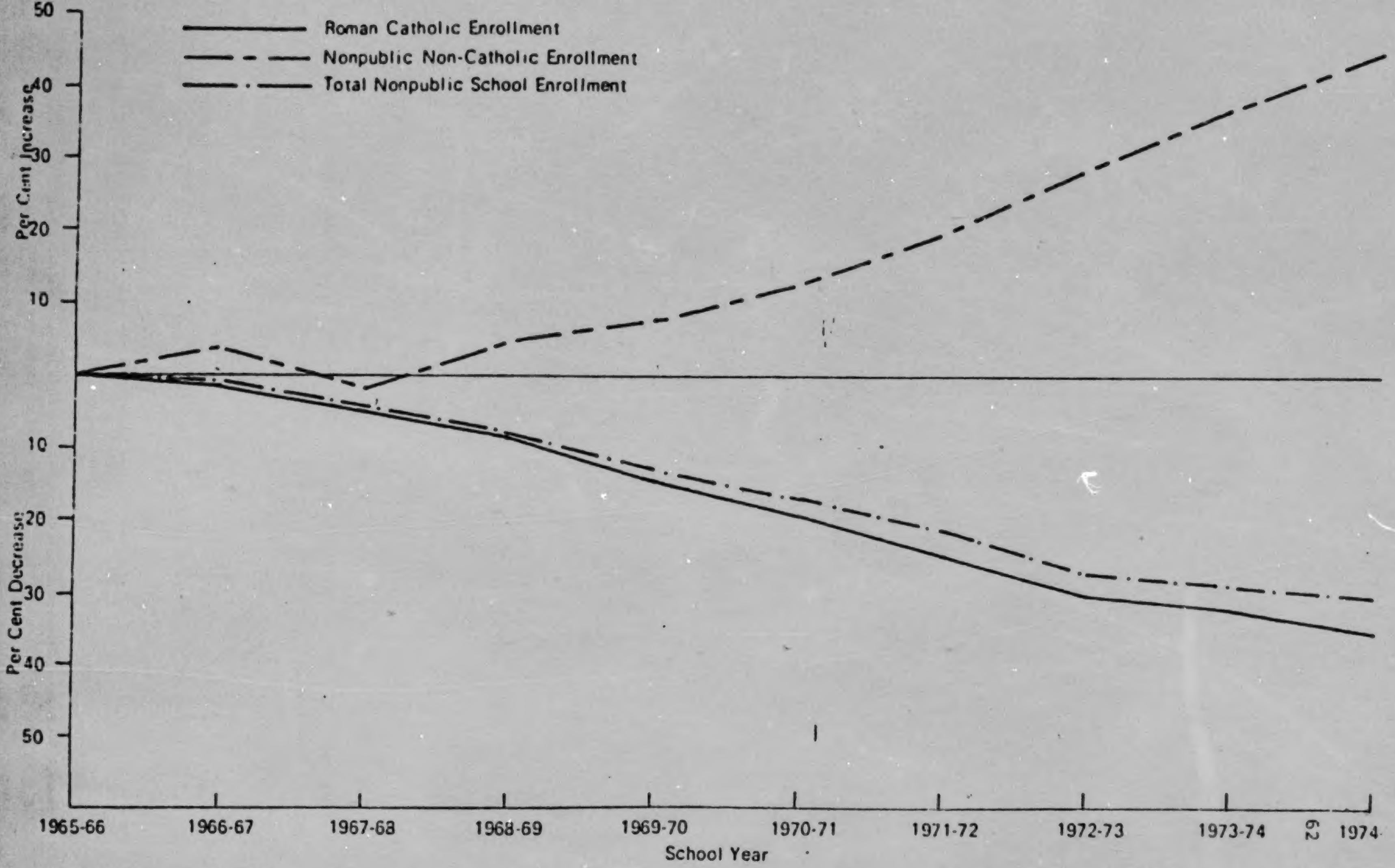
Erickson found that a group of national leaders attributed the revived interest in non-public schools to public alienation with public schools, including such matters as drug abuse, loose discipline, sex education, controversial books, and lack of academic rigor.

C. Private School Trends

Turning now to more recent trend data, the total enrollment in public and private schools may be seen in Figure 85.

FIGURE 84

PER CENT CHANGE IN NONPUBLIC SCHOOL ENROLLMENT BY ROMAN CATHOLIC AND NON-ROMAN CATHOLIC ENROLLMENT BASED ON 1965-66 SCHOOL YEAR[4]



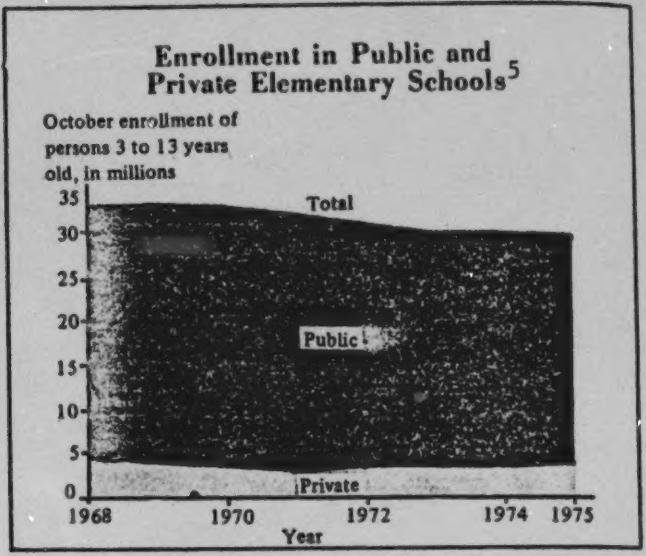
The relationship of family income to the public/private school choice clearly shows an increase in those with incomes of $10,000 to $15,000 per year and in those incomes over $15,000. Insofar as private schools cost money, it is quite plausible that those with the money are the ones to first exercise that option (Figure 86).

The cost of educating a child in a private school is roughly equivalent to that of operating the family car, on an annual basis.

In a regional examination of private elementary schools, the same trend is visible, but even more striking is the extremely steep money gradient in the Southeast (Figure 87). The movement to private schools is by no means totally white. In the Northeast and the Southeast, the Black enrollment in private schools peaked at about ten and three percent, respectively, in 1972. A significant percentage of Blacks, however, are enrolling in private schools. It is not surprising, however, with the general depression in Black incomes as compared to whites incomes, that fewer Blacks would enroll (Figure 88).

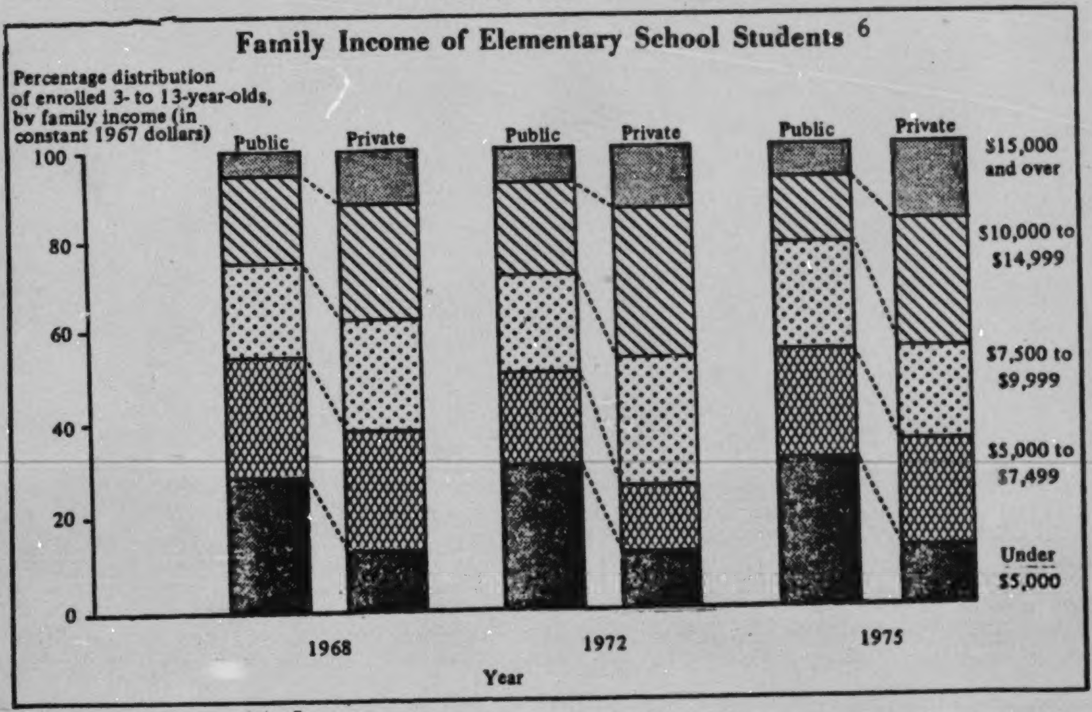
When one turns to secondary school students, an even more significant effect can be seen between 1970 and 1975 (Figure 89). Those families with the money are moving to private schools (see Figure 90). The same general trends hold by region and race (Figures 91, 92 and 93).

FIGURE 85



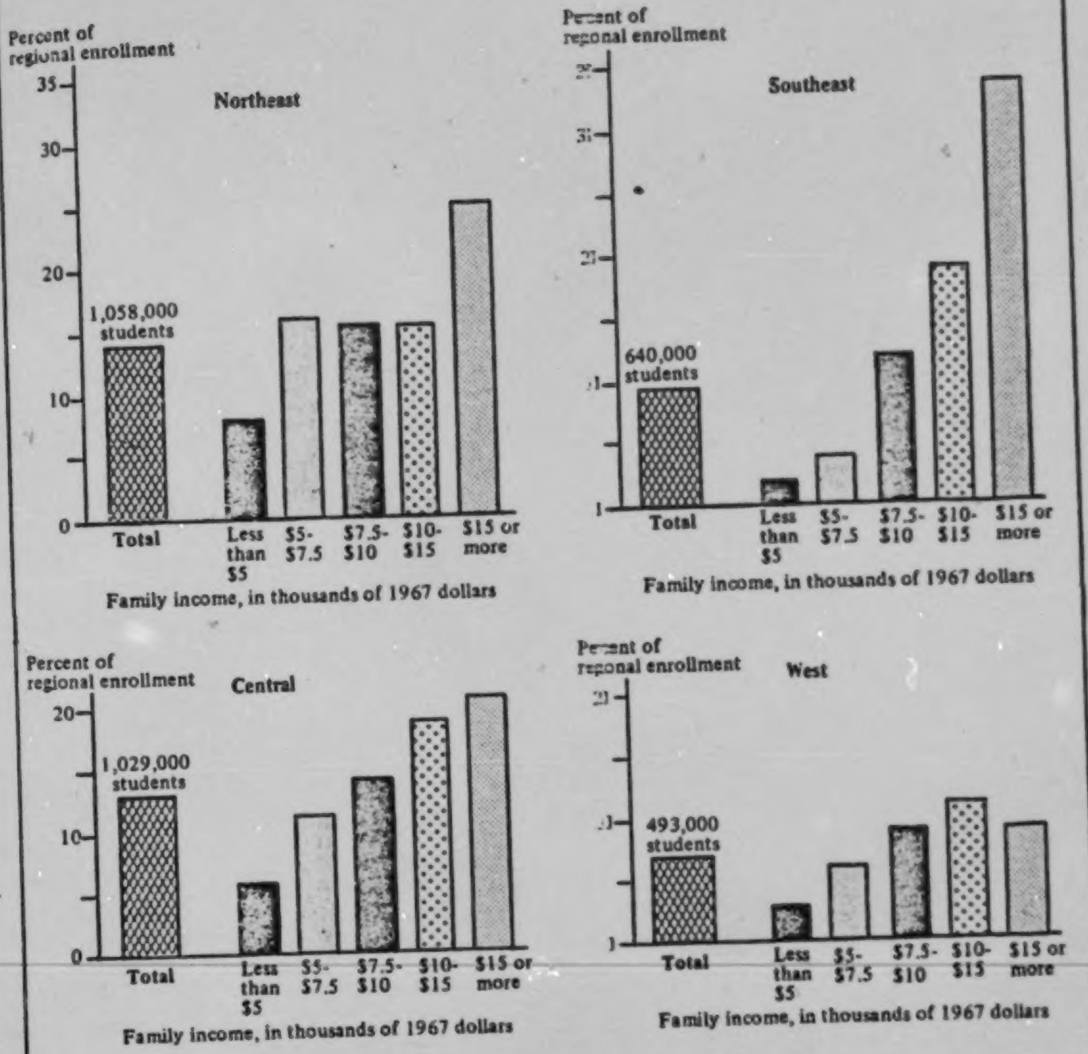
Enrollment in Public and Private Elementary Schools[5]

FIGURE 86



Family Income of Elementary School Students [6]

FIGURE 87



Regional Enrollment in Private Elementary Schools[7]

FIGURE 88

Enrollment in Private Secondary Schools, by Region and Race [8]

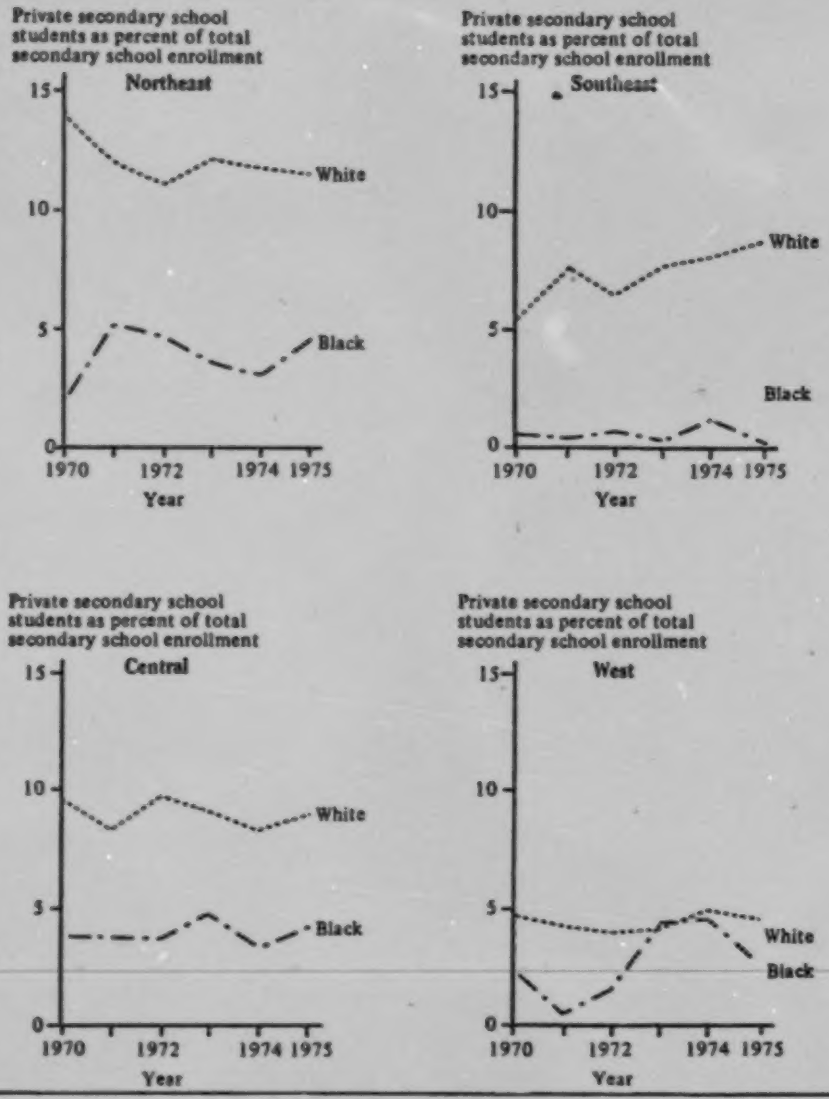


FIGURE 89

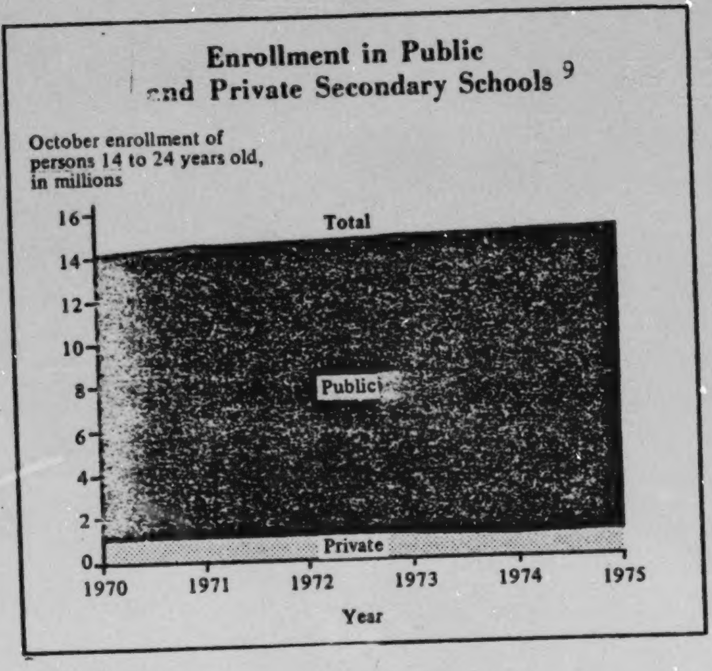
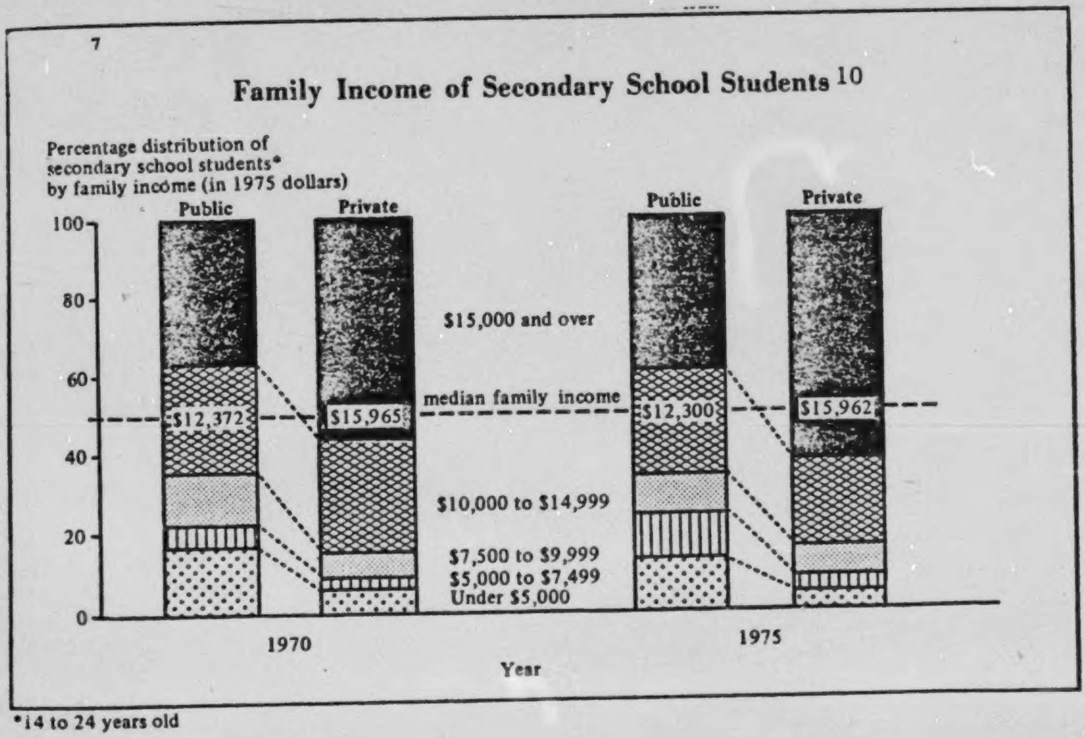
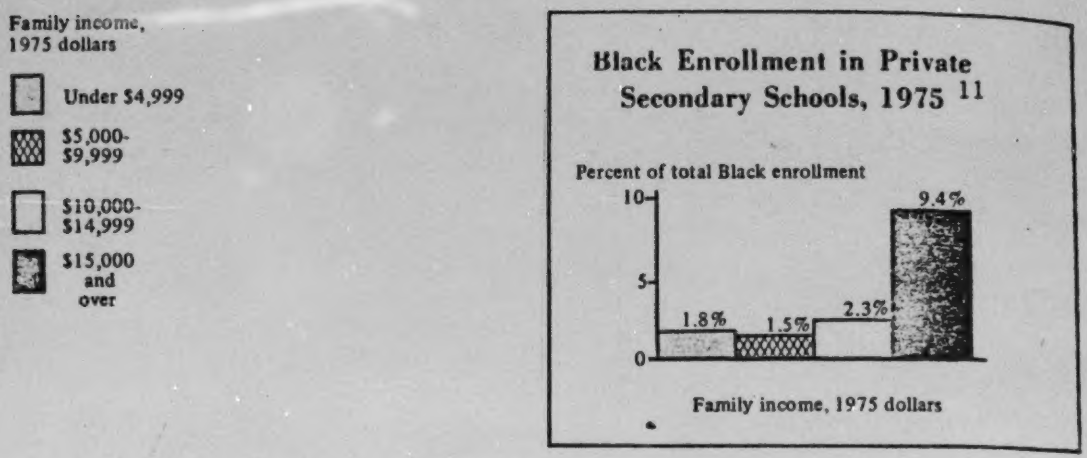


FIGURE 90



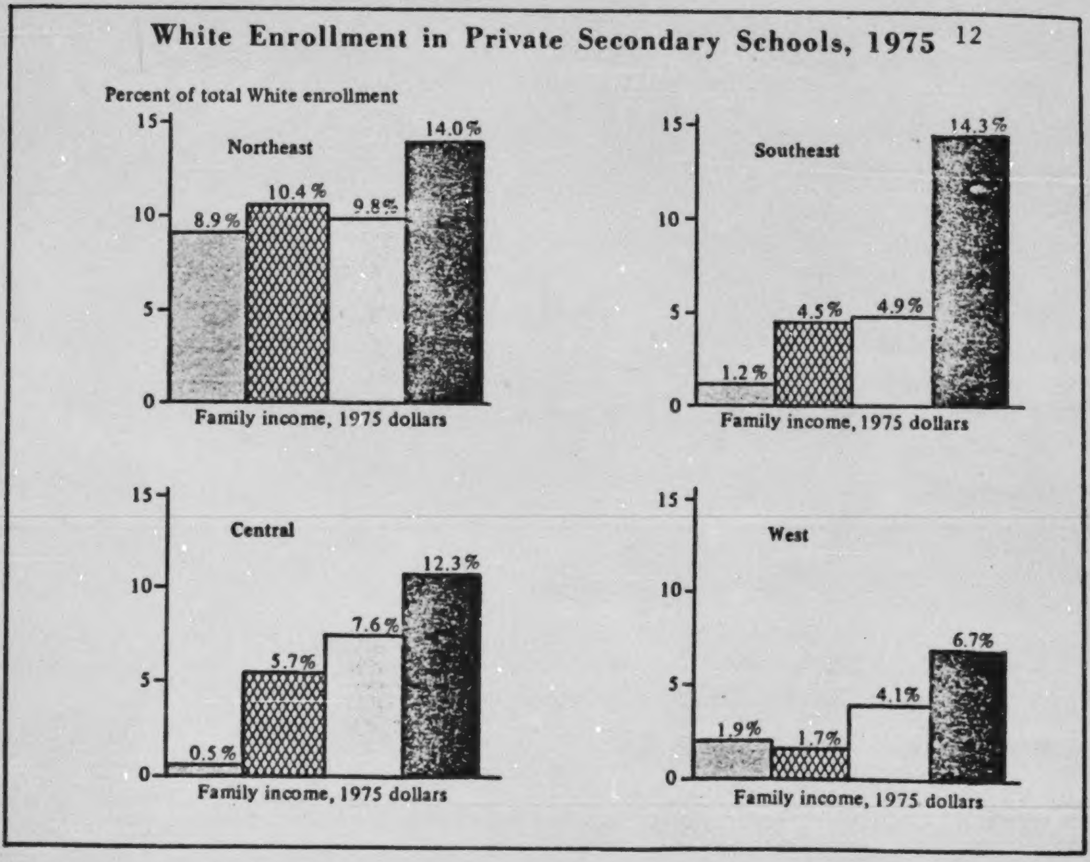
*14 to 24 years old

FIGURE 91



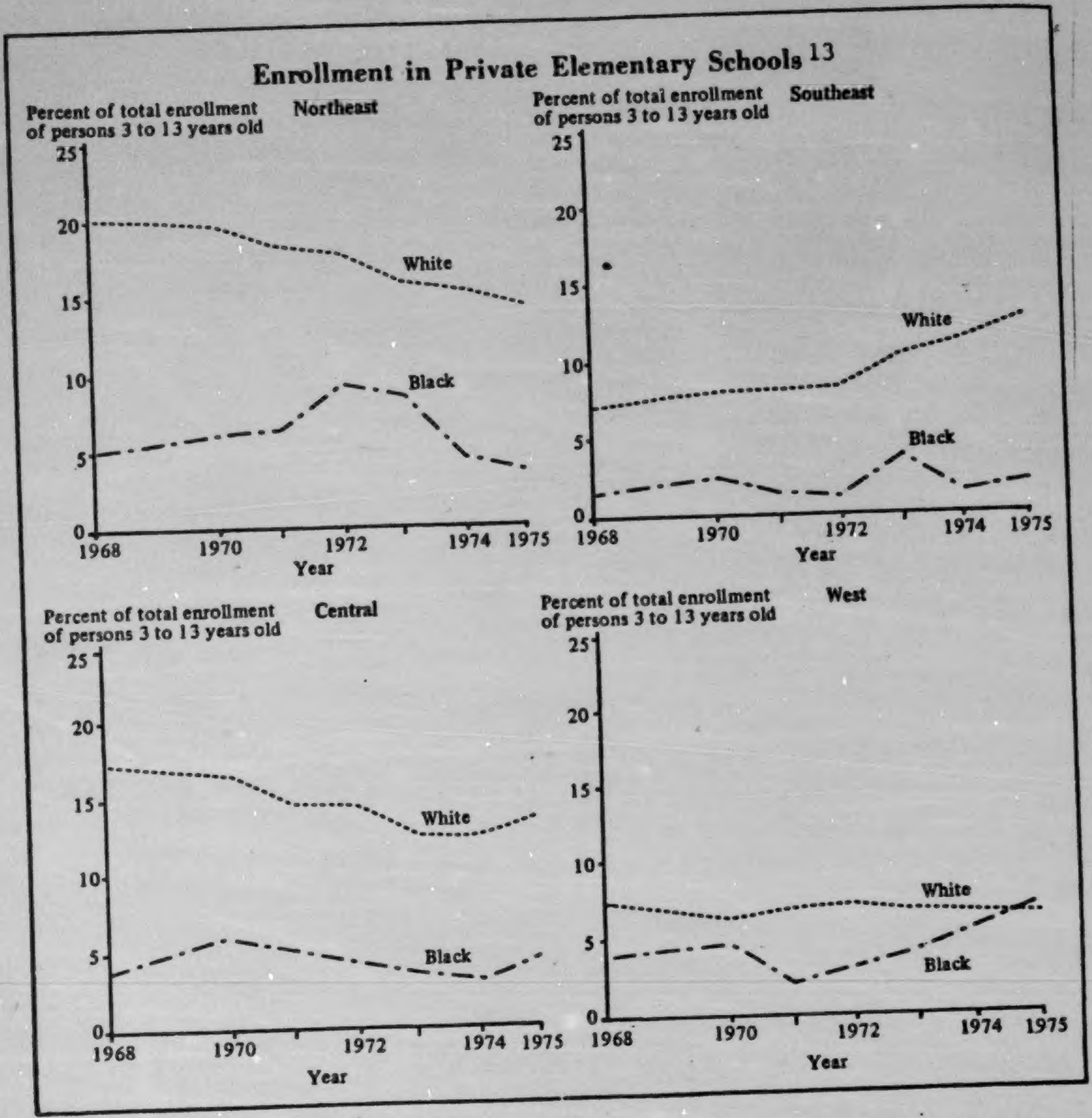
Black Enrollment in Private Secondary Schools, 1975 [11]

FIGURE 92



White Enrollment in Private Secondary Schools, 1975 [12]

FIGURE 93


Enrollment in Private Elementary Schools 13
Percent of total enrollment of persons 3 to 13 years old
Northeast
25
20
15
10
5
0
White
Black
1968
1970
1972
1974
1975
Year
Percent of total enrollment of persons 3 to 13 years old
Southeast
25
20
15
10
5
0
White
Black
1968
1970
1972
1974
1975
Year
Percent of total enrollment of persons 3 to 13 years old
Central
25
20
15
10
5
0
White
Black
1968
1970
1972
1974
1975
Year
Percent of total enrollment of persons 3 to 13 years old
West
25
20
15
10
5
0
White
Black
1968
1970
1972
1974
1975
Year

The Florida Study

A detailed study of compliance and rejection of compliance with segregation in seven Florida districts has been conducted by a team from Cleveland State University and Florida-Atlantic University.[14]

Table 86 shows a comparison of enrollments in the fall of 1970 and the fall of 1973 for the seven districts and the percent change of enrollment of public and private schools. There was an increase of 34 percent in private school enrollment. The beneficiaries of the private school growth were Protestants and other non-Catholics sectarian schools (111 percent increase) and non-sectarian schools (68 percent increase). Catholic parochial enrollments declined.

In looking at the details, the data show that the percent of withdrawal of the child from school, increase with family incomes. Of families earning less than $12,000 a year, 2½ percent withdrew their child; for those earning $12,000 to $21,000, 5.4 percent withdrew. When these are broken down according to the level of education and income (Table 87), the rate of withdrawal of the child is seen to increase both with the level of the education of the parent and with income. Those families with more than high school education and earning more than $21,000 withdrew at the rate of 13.4 percent.

The United States Commission on Civil Rights conducted a survey on desegregation. The surveyed school superintendents, representing

TABLE 86

TOTAL PUBLIC AND PRIVATE SCHOOL ENROLLMENTS, K-12, IN STUDY DISTRICTS AND PERCENT CHANGE, 1970-73[15]

FLORIDA

	FALL, 1970		FALL, 1973		% CHANGE 1970 - 1973	
	PUBLIC	PRIVATE	PUBLIC	PRIVATE	PUBLIC	PRIVATE
Dade	259,452	33,138	263,932	44,306	+ 1.7	+33.7
Duval	130,680	8,777	121,118	14,179	- 7.3	+61.5
Escambia	51,192	6,205	51,815	6,377	+ 1.2	+ 2.8
Lee	23,350	1,044	30,018	1,168	+28.4	+11.9
Leon	22,376	1,482	22,816	2,766	+ 2.0	+86.6
Manatee	18,585	744	21,609	840	+16.3	+12.9
Palm Beach	74,380	7,195	77,542	9,081	+ 4.3	+26.2
TOTALS	580,041	58,585	588,920	78,717	+ 1.5	+34.4

TABLE 87

REMOVAL OF CHILDREN FROM PUBLIC SCHOOL SYSTEMS BY EDUCATION AND INCOME[16]

	EDUCATION - GRADES COMPLETED		
ANNUAL FAMILY INCOME	1-7	8-12	13+
$ 11,999 OR LESS	3.4	2.3	4.3
12,000-20,999	2.1	5.0	6.8
21,000+	6.6	4.1	13.4

1292 school districts which constitute 47 percent of all school districts in the country having at least five percent minority enrollment, and the student enrollment of 1500 or more. These data were combined with data from the Office of Civil Rights for the Department of Health, Education and Welfare. That report concludes:[17]

> The reduction in the percentage of white students does appear to be related to the proportion of Black students, but this is irrespective of whether desegregation has taken place. In the 4 years 1968-72, districts that had greater than 40 percent Black enrollments in 1968 experienced a reduction of 15 percentage points in the proportion of white students, a much greater drop than in districts with lower proportions of Black enrollment.

It should be noted that of the 874 districts from which data were available, the reduction in proportion to whites over four years was 6 percent (see Tables 88 and 89).

TABLE 87

NUMBER OF DISTRICTS AND THEIR AVERAGE REDUCTION IN PROPORTION WHITE, 1968-72, AND BY PROPORTION BLACK IN 1968.[18]

PROPORTION BLACK (1968)		TOTAL DISTRICTS
0-20% BLACK	AVERAGE REDUCTION	4%
	NUMBER OF DISTRICTS	538
20-40% BLACK	AVERAGE REDUCTION	3%
	NUMBER OF DISTRICTS	178
40-100% BLACK	AVERAGE REDUCTION	15%
	NUMBER OF DISTRICTS	160
ALL DISTRICTS	AVERAGE REDUCTION	6%
	NUMBER OF DISTRICTS	874

TABLE 89

NUMBER OF DISTRICTSAND THEIR AVERAGE REDUCTION IN PROPORTION WHITE 1968-72.[19]

COMMUNITY SIZE		TOTAL
METROPOLITAN 50,000+	AVERAGE REDUCTION	10 %
	NUMBER OF DISTRICTS	146
10,000-50,000 IN SMSA	AVERAGE REDUCTION	6 %
	NUMBER OF DISTRICTS	136
SUBURBAN	AVERAGE REDUCTION	3 %
	NUMBER OF DISTRICTS	127
NONMETROPOLITAN		
10,000-50,000 NON-SMSA	AVERAGE REDUCTION	5 %
	NUMBER OF DISTRICTS	175
RURAL	AVERAGE REDUCTION	5 %
	NUMBER OF DISTRICTS	283
ALL DISTRICTS	AVERAGE REDUCTION	6 %
	NUMBER OF DISTRICTS	867

XI. DECLINE IN THE AGE OF ONSET OF PUBERTY[1]

The age of menarche, that is, the age of first menstruation, is a convenient biological marker for the onset of puberty. As a long-term trend in western Europe and the United States, going back to at least 1830, the age of menarche has dropped four months per decade. In general, the age of menarche in the United States preceeds that of Europeans by about six months.[2]

This increasingly early physical maturation applies to boys as well, although there is no convenient biological marker. The social significance of earlier physical maturation was recognized decades ago and is partly reflected in the concept of the junior high school. Unfortunately, the junior high school never developed an effective sense of its own educational function as a way station for those too mature for elementary school but too socially immature for a high school environment.

Other social forces moving into play however, make attention to the educational implications of this trend more urgent. The only group in the United States now undergoing significant expansion in birth rates are females under age 15.[3]

- In 1975, of the 3,144,198 live births, 12,642 were born to women under 15 years of age.

- 220,270 babies were born to women 15 - 17 years of age age.

Since maximum ability to conceive is not immediately developed at menarche, these birth rates suggest a much higher level of sexual activity in this age group.

Of these children born to the 15 and under mothers, 5,073 were born to white mothers and 7,315 to Black mothers.

This pattern of early adolescent conception marks an 8 percent increase in the rate of births for girls 10 to 14 years old. The births accounted for only 0.4 percent of all births.

Educational implications of this situation follow in several different directions: Young motherhood is associated with a variety of congenital defects in the child. Young motherhood also interfers with the ability to continue education. Young motherhood carries a higher risk of having and raising a defective child. The negative consequences result for the child-mother and the child may be self-reinforcing and accrue directly to the school system.

A. Some Effects of Very Early Childbearing

The disastrous effects of childbearing by very young mothers is brought out in a study of 5,000 pregnancies conducted over the past 15 years by Dr. Janet Hardy, Professor of Pediatrics and Professor of Public Health Administration of the John Hopkins University. Among the infants studied, 550 were born to girls 16 years of age or younger. The children are all now 10 to 16 years old. Some of the indicator outcomes associated with pregnancy complications or later developments are shown below:[4]

Item	Percent Occurence
Prior Pregnancy	10
Toxemia of Pregancy	37
Perinatal death	4
Prematurity (birth weight below 5½ pounds)	22
Neurological status other than normal at 12 months	10
IQ of the child at 4 Years	
70 and below	11 (Gen. pop. 2.6%)
110 and above	5 (Gen. pop. 25%)
IQ of the child at 7 years	
70 and below	5.3(Gen. pop. 2.2%)
110 and above	2.8 (Gen. pop. 25%)

B. Sexual Behavior of Teenagers

In a systematic study comparing sexual experience of young unmarried women in 1976 and 1971, Zelnick and Kantner of Johns Hopkins found a 30 percent increase in sexual activity of young unmarried women, so that by age 19, 55 percent of young unmarried women have had sexual intercourse.

Figure 94 shows the distribution of never married females, age 15-19, who have had intercourse. Data is by age, during the years 1971 and 1976.

In Table 90 are displayed the substantial differences between whites and Blacks in this regard. Fourteen percent of white females have had sexual intercourse by age 15 whereas 38 percent of Blacks have. Today, by age 18, 44 percent of whites and 74 percent of Blacks have had sexual intercourse.

From Soransen's study (1973) of adolescent non-virgins there may be some curriculum implications in sex education as well as some implication for extension education of parents (See Table 91).

C. Teenage Births are Unwanted or Unplanned

A study in New York City covering the years 1963-74 shows that 80 percent of first births to women from 15 to 19 years old were not planned; 67 percent of them occurred among females who were not high school graduates, 61 percent were not married (see Figure 95).

TABLE 90

Percent of never-married women aged 15-19 who have ever had intercourse, by age and race, 1976 and 1971[5]

Age	Study year and race												
	1976					1971					% increase 1971-1976		
	All	White		Black		All	White		Black		All	White	Black
		%	N	%	N		%	N	%	N			
15-19	**34.9**	**30.8**	**1,232**	**62.7**	**654**	**26.8**	**21.4**	**2,633**	**51.2**	**1,339**	**30.2**	**43.9**	**22.5**
15	18.0	13.8	276	38.4	133	13.8	10.9	642	30.5	344	30.4	26.6	25.9
16	25.4	22.6	301	52.6	135	21.2	16.9	662	46.2	320	19.8	33.7	13.9
17	40.9	36.1	277	68.4	139	26.6	21.8	646	58.8	296	53.8	65.6	16.3
18	45.2	43.6	220	74.1	143	36.8	32.3	396	62.7	228	22.8	35.0	18.2
19	55.2	48.7	158	83.6	104	46.8	39.4	287	76.2	151	17.9	23.6	9.7

Note: *In this and subsequent tables:* Base excludes those for whom no informaticn was obtained on intercourse; this amounted in 1971 to 1.2 percent of the never-married blacks and 1.3 percent of the whites; and, in 1976, to 0.9 percent of the blacks and 0.7 percent of the whites. Percentages for .vhites and blacks are computed from unweighted data (Ns in tables); percentages for total sample are computed from weighted data and thus may sometimes appear to be inconsistent with figures by race. Figures for 1971 differ from earlier published reports because they exclude women living in group quarters. Except where indicated, the base excludes women who did not respond to the question analyzed in the table.

FIGURE 94

Percent of never-married women aged 15–19 who have ever had intercourse, by age, 1976 and 1971[6]

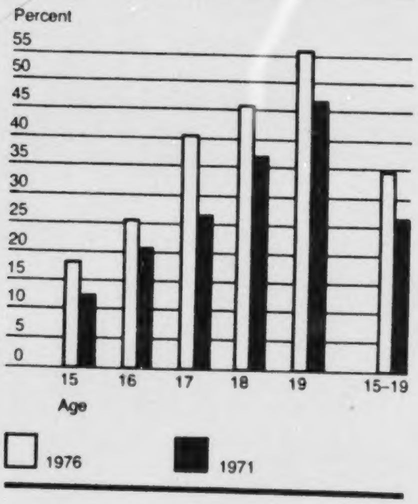


TABLE 91

Behavior and Attitudes of Adolescent Nonvirgins as Related to Sexual Responsibility, by Age and Experience[7]

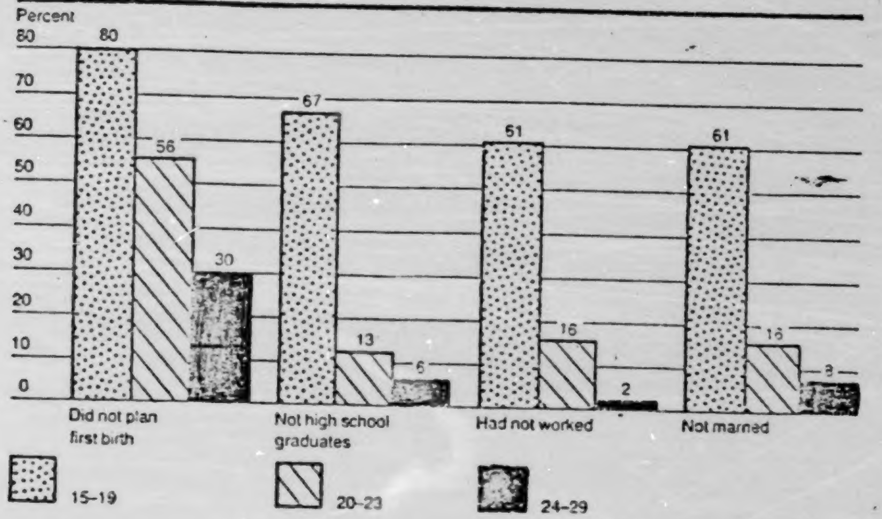
Attitude or behavior	By age			By experience	
	All	Ages 13-15	Ages 16-19	With current intercourse experience	With no current intercourse experience
Sometimes worry about becoming pregnant (451, 452)	70%	61%	72%	71%	68%
Used contraception first time (385)	19			29	3
Used contraception most recent time (507)				40 (13-15, 23%; 16-19, 46%)	
Do not know where to secure contraceptive information (301)	16	32	9		
Precaution taken in past month (481)				62	
Never trusted to luck in past month (503)				63	
Would have abortion if became pregnant (457, 458)	18	2	23	23	3
Would get married if became pregnant (458)[a]	31			31	30
Have used pills (386)	31	10	39		
Fear has prevented intercourse (476)	44			38	58
Contraception (except pill) too much trouble (308)	45	35	49		
Neither used contraception last time (507)	40	45	38		
Have never thought about getting pregnant in last month (505)				82	
Don't worry because abortion so available (330)	14	21	11		
Have been pregnant (479, 480)	23	11	28	28	7

Note: Figures in parentheses refer to tables.

[a] In 27 percent of the cases the young man said he would marry the young woman; in 46 percent of the cases he might marry her

FIGURE 95

Percent of women aged 15–19, 20–23 and 24–29 at the birth of their first child, by birth planning and marital status, educational level and employment experience, New York City, 1973–1974 [8]



According to a 1968 report between 1/2 and 2/3 of all female dropouts from high school cited pregnancy and/or marriage as their principal reason for leaving school. While the policy of the Office of Education is that every pregnant adolescent has the right to continue her education, it is highly doubtful that this is an opportunity effectively pursued.

Frank F. Furstenberg, of the Center for Population Research, University of Pennsylvania, who has made an extensive study and published a book under the title *Unplanned Parenthood: The Social Consequence of Teen-Age Childbearing*, summarizes his observations:[9]

> In our investigation, we discovered a sharp and regular pattern of differences in the marital, childbearing, educational and occupational careers of adolescent mothers, as compared to their classmates. The young mothers consistently experienced greater difficulty in realizing life plans; gaping disparity existed between the goal they articulated in the first interview and their experience following delivery. In contrast, we found that the classmates expecially, those who do not become pregnant premaritally during the five years of study had a far better record of achieveing their immediate objectives in life. The early pregnancy created a distinct set of problems for the adolescent parent, it forced a redirection of her intended life course. In particular, we established a number of links connected to early childbearing, to complication in marriage, to disruption of schooling, to economic problems, and to some extent to problems in family size regulation and child rearing as well.

XII. SOME NON-DEMOGRAPHIC VARIABLES INTERACTING WITH DEMOGRAPHY

As noted in Table 2 of the introduction, a variety of non demographic factors have been identified as likely to have a primary interaction with demographic trends. This section presents some sketchy, but hopefully suggestive, information about two of these variables--energy and changes in the structure of occupations.

A. Energy

The permanent shift upward in the price of energy, most conspicuously seen in liquid and gas fuel prices, is likely to have direct and indirect effects on the elementary school system.

The direct effects may come in terms of:

- Fuel costs for heating
- Fuel costs for transportation and busing
- Longer term effects on structure and design of buildings
- A movement toward larger size school units, for the scale economies associated with larger buildings.

Indirect effects are likely to come about through:

- The indirect increase in the cost of all goods, hence a reduction in discretionary income, that may effect parental expenditures in relation to school and their willingness to allocate funds to school.

- o Relocation in choice of residence may effect school district populations.
- o Private home owners, dual income families, upper middle class and high income families will have the greatest opportunities for savings and the most discretion in response to energy cost.

As Peter Morrison of the Rand Corporation has pointed out "...the complex calculus whereby families form residential location preferences may be modified by a heightened need to live near their work."[1]. (This may be especially true of dual income families.)

Table 92 shows the great increase in fuel or heat expenditures for schools in current dollars between 1969-70 and 1973-74. These are for a sample of states across the country, organized by region. The data brackets the fuel crisis, 1969-70 being before, 1973-73, after the event. It is noteworthy that in the northeast there was an average increase of 138 percent. It was greater than that for the Southeast (42 percent), in the Central states (47 percent), and in the Western states (75 percent).

The percentage of school children being bused has, or course, significantly increased in the last decade as a result of civil rights demands, legislation and court orders. That pattern is shown in Table 93.

In 1950-60, 37.6 percent of the pupils were bussed. This rose to 51.5 percent in 1973-74. The total expenditures in that same interval rose from less than a half billion dollars to $1,858,141,000, while the cost per pupil rose from $40 to $87 in current dollars.

While in current terms that $87 represents approximately 5 percent of the per pupil cost for pupils transported and less than 3 percent of the cost per pupil for all pupils, it may still be seen as a opportunity for curtailment of school costs in a time of shrinking budgets and inflation.

It should be further noted that the costs per pupil for transportation are only to a small extent attributable to fuel. Decisions about how to respond to the energy cost situation ought not be arbitrarily exercised without attention to the possible effects on primary educational functions.

B. The Rise of the Knowledge Industries and Other Structural Changes In Our Work Patterns

Since 1910, there has been sharp decline in the percentage of workers in the primary industries, such as agriculture, forestry, fishing, and minerals extractions. A relatively stable percentage has been in the secondary sector of manufacturing and construction. There has been a sharp increase in the number in the tertiary sector -- trade, finance, real estate, transportation, communication, etc. (see Figure 96).

The details of such distribution in the last 25 years are shown in Table 94. However, those figures do not reveal what is a major, basic and relatively new trend within the labor sector, the movement toward

Table 92

Fuel and heating costs for U.S. Schools, by State: 1969-70, 1971-72, and 1973-74.

(Current dollars in thousands)[2]

	1969-70	1971-72	1973-74	Change from 1969 to 1974
UNITED STATES				
NORTHEAST	47,039		111,929	1.38
Connecticut	–	–	–	–
Delaware	932	1,493		
District of Columbia	515	840		
Maine	2,190	2,732	4,498	1.05
Maryland	3,997	8,225	11,809	1.95
Massachusetts	7,967	12,668	26,192	2.29
New Hampshire	1,300	1,663	2,911	1.24
New Jersey	10,140		25,456	1.51
New York	–			
Pennsylvania	18,616	26,267	35,359	.90
Rhode Island	1,504	2,116	3,245	1.16
Vermont	1,325	1,630	2,459	.86
SOUTHEAST	29,341		41,773	.42
Alabama	–	–	–	
Arkansas	1,888	2,384	2,282	.21
Florida	2,740	2,860	–	.04
Georgia	4,668	–	–	
Kentucky	3,302	3,883	4,092	.24
Louisiana	1,559	1,669	2,037	.31
Mississippi	1,985	1,840	2,085	.05
North Carolina	4,580	6,447	8,070	.76
South Carolina	3,000	3,068	3,864	.29
Tennessee	4,587	5,476	6,243	.36
Virginia	5,591	7,018	10,069	.69
West Virginia	2,489	2,568	3,031	.22
CENTRAL	94,896		139,874	.47
Illinois	16,941	22,551	26,969	.59
Indiana	9,716	11,284	14,725	.52
Iowa				
Kansas	9,873			
Michigan	19,765	23,226	29,577	.50
Minnesota	8,904	10,995	13,880	.56
Missouri	6,474	7,062	9,292	.44

Table 92 Continued

	1969-70	1971-72	1973-74	Change from 1969 to 1974
Nebraska	2,747	3,068	3,937	.43
North Dakota	1,752	1,964	2,771	.58
Ohio	17,491	20,144	22,310	.28
South Dakota	1,551	1,778	2,481	.60
Wisconsin	9,555	11,407	13,932	.46
WEST	14,652		25,647	.75
Alaska	1,268			
Arizona				
California				
Colorado	2,867	3,432		.20
Hawaii				
Idaho	1,213	1,584	2,071	.71
Montana				
Nevada	626	753	1,088	.74
New Mexico	1,376	1,317	1,823	.32
Oklahoma	2,375	2,399	3,108	.31
Oregon	2,954	4,659	5,938	1.01
Texas	5,555			
Utah	1,525	1,768	2,406	.58
Washington	4,583	6,978	9,213	1.01
Wyoming	1,818	698		
OUTLYING AREAS				
American Samoa				
Canal Zone				
Guam				
Puerto Rico				
Virgin Islands				

SOURCE: Department of Health, Education, and Welfare, National Center for Education Statistics, Statistics of State School Systems.

Table 93

Number and percent of public school pupils transported at public expense, and current expenditures for transportation: United States, 1929-30 to 1973-74 [3]

School year	Total enrollment	Pupils transported at public expense		Expenditure of public funds	
		Number	Percent of total enrollment	Total, excluding capital outlay (in thousands)	Average cost per pupil transported
1	2	3	4	5	6
1929-30 . . .	25,678,015	1,902,826	7.4	$54,823	$28.81
1931-32 . . .	26,275,441	2,419,173	9.2	58,078	24.01
1933-34 . . .	26,434,193	2,794,724	10.6	53,908	19.29
1935-36 . . .	26,367,098	3,250,658	12.3	62,653	19.27
1937-38 . . .	35,975,108	3,769,242	14.5	75,637	20.07
1939-40 . . .	25,433,542	4,144,161	16.3	83,283	20.10
1941-42 . . .	24,562,473	4,503,081	18.3	92,922	20.64
1943-44 . . .	23,266,616	4,512,412	19.4	107,754	23.88
1945-46 . . .	23,299,941	5,056,966	21.7	129,756	25.66
1947-48 . . .	23,944,532	5,854,041	24.4	176,265	30.11
1949-50 . . .	25,111,427	6,947,384	27.7	214,504	30.88
1951-52 . . .	26,562,664	7,697,130	29.0	268,827	34.93
1953-54 . . .	[1]25,643,871	[1]8,411,719	32.8	307,437	[1]36.55
1955-56 . . .	[1]27,740,149	[1]9,695,819	35.0	353,972	[1]36.51
1957-58 . . .	[1]29,722,275	[1]10,861,689	36.5	416,491	[1]38.34
1959-60 . . .	[1]32,477,440	[1]12,225,142	37.6	485,338	[1]39.78
1961-62 . . .	[1]34,682,340	[1]13,222,667	38.1	576,361	[1]43.59
1963-64 . . .	[1]37,405,058	[1]14,475,778	38.7	673,845	[1]46.55
1965-66 . . .	[1]39,154,497	[1]15,536,567	39.7	787,358	[1]50.68
1967-68 . . .	[1]40,827,965	[1]17,130,873	42.0	931,006	[1]57.27
1969-70 . . .	[1]41,934,376	[1]18,198,577	43.4	1,218,557	[1]66.96
1971-72 . . .	[1]42,254,272	[1]19,474,355	46.1	1,507,830	[1]77.43
1973-74 . . .	[1]41,438,054	[1]21,347,039	51.5	1,858,141	[1]87.04

[1] Pupils in average daily attendance.

knowledge-based and knowledge-dependent industries. Porat's work as shown in Figure 97 makes the point that 50 to 55 percent of the current labor force is in information and information-related industries.

Crucial to the present study is the rising dependency on information and scientific, technical and professional occupations. There has been a major shift in strategic resources from financial capital to knowledge and an associated growth of knowledge-related industries. All of this, of course, has major implications for three aspects of education:

- The preparation for the world at work
- The appreciation of the fundamental organization of this rapidly restructuring society for woman labor
- The equalization of many job opportunities between men and women, young and old, the physically and less physically able

Changes in the structure of occupations reduce the general dependency on physical strength and stamina for the largest number of occupations. This change opens the door to wider scale employment of women.

Since the information society puts a great demand on the ability to read and write English, the completion of some level of formal education, either high school or college, is a crucial element in being able to take the first few steps on the economic mobility ladder. The shifts to the information industries are also opening up new kinds of diversification in the size and location of work facilities. The decentralization of facilities opens further opportunities to women for part-time employment or for full-time employment closer to home.

Table 94

Distribution of Employment Among Major Occupational Divisions in the United States 1950, 1960, and 1970 -- in Percent[4]

	1950	1960	1970
All Occupations*	100	100	100
White Collar United States	36.3	41.4	48.2
Blue Collar United States	39.3	36.7	35.9
Farm Workers United States	11.9	6.1	3.1
Service Workers United States	10.1	11.1	12.8

*1950, 1960 percentages total less than 100 because of unreported occupations, approximately 1% and 5%, respectively.

Figure 96

Percent Distribution of Employment in Industry by Sector in the United States 1910-1970[5]

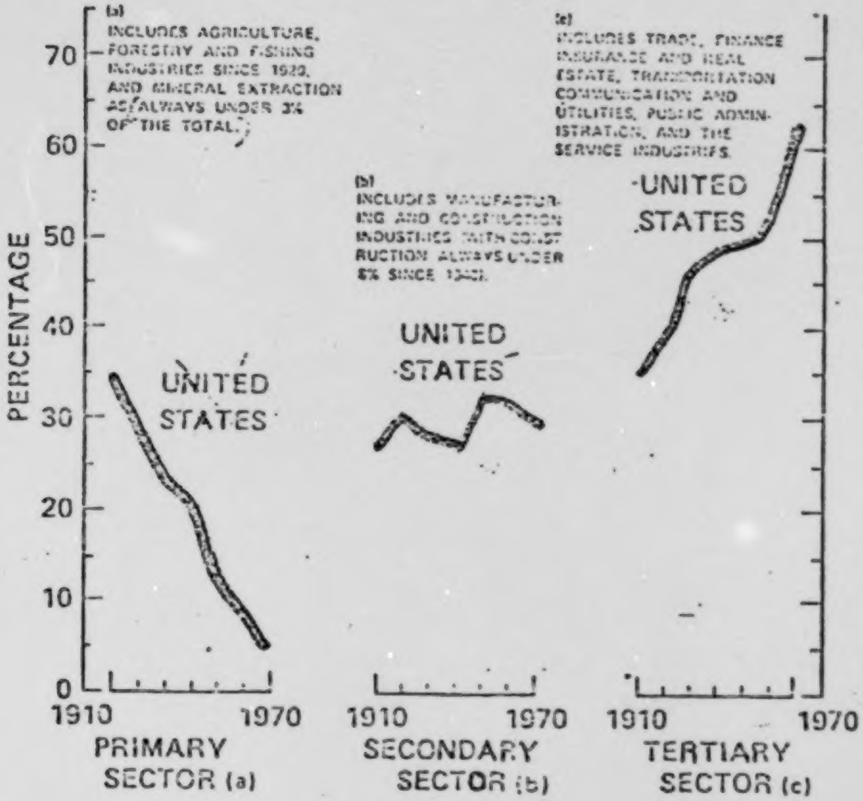


Figure 97

Percent of Labor Force in the Information Industries[6]

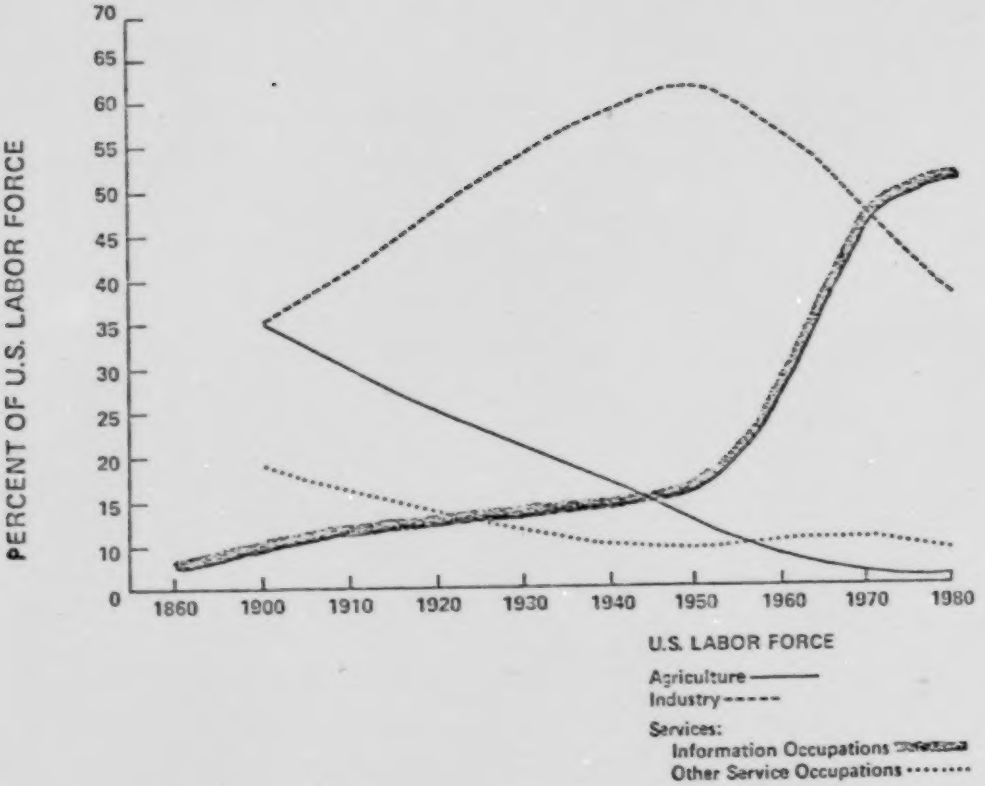


Table 95

The Post-Industrial Society: A Comparative Schema [7]

MODES	PRE-INDUSTRIAL	INDUSTRIAL	POST-INDUSTRIAL
MODE OF PRODUCTION	Extractive	Fabrication	Processing; Recycling
ECONOMIC SECTOR	Primary *Agriculture* *Mining* *Fishing* *Timber* *Oil and Gas*	Secondary *Goods-Producing* *Manufacturing* *Durables* *Non-durables* *Heavy Construction*	Services Tertiary *Transportation* *Utilities* Quaternary *Trade* *Finance* *Insurance* *Real Estate* Quinary *Health* *Research* *Education* *Government* *Recreation*
TRANSFORMING RESOURCE	Natural Power *Wind, Water, Draft animals, Human muscle*	Created Energy *Electricity—oil, gas, coal* *Nuclear power*	Information[1] *Computer and data-transmission systems*
STRATEGIC RESOURCE	Raw Materials	Financial Capital	Knowledge[2]
TECHNOLOGY	Craft	Machine Technology	Intellectual Technology
SKILL BASE	Artisan, Manual worker, Farmer	Engineer, Semi-skilled worker	Scientist, Technical and Professional occupations
METHODOLOGY	Common Sense, Trial and error, Experience	Empiricism, Experimentation	Abstract Theory: *models, simulations, decision theory, systems analysis*
TIME PERSPECTIVE	Orientation to the past	Ad hoc adaptiveness, experimentation	Future orientation: forecasting and planning
DESIGN	Game Against Nature	Game Against Fabricated Nature	Game Between Persons
AXIAL PRINCIPLE	Traditionalism	Economic Growth	Codification of Theoretical Knowledge

Table 96

THE INFORMATION INDUSTRIES [8]

	Approximate Gross Revenues (in billions of dollars)					
	1970	1971	1972	1973	1974	1975
Broadcast television	2.8	2.8	3.2	3.5	3.8	NA
Cable television	0.3	0.3	0.4	0.5	0.6	0.7
Broadcast radio	1.1	1.3	1.4	1.5	1.6	NA
Telephone	18.2	20.0	22.6	25.5	28.3	31.3
Telegraph	0.4	0.4	0.4	0.5	0.5	0.5
Specialized common carriers	0.0	0.0	0.0	0.0	0.0	0.0
Satellite carriers	0.1	0.1	0.1	0.1	0.1	0.1
Mobile radio systems	2.0	2.2	2.4	2.6	2.9	NA
Motion pictures	3.8	3.8	2.9	3.8	NA	NA
Organized sports, theaters, etc.	4.4	NA	NA	NA	NA	NA
Computer software suppliers Computer service suppliers >	1.5	1.7	2.0	2.5	3.0	3.6
Postal service	6.3	6.7	7.9	8.3	9.0	10.0
Private information delivery services	0.7+	0.8+	1.0+	1.2+	1.3+	1.6+
Newspapers; wire services	7.0	7.4	8.3	8.9	9.4	9.7
Periodicals (including newsletters)	3.2	3.2	3.5	3.9	4.0	4.2
Business consulting services	0.9	1.1	1.1	1.5	NA	NA
Advertising	7.9	7.6	8.0	8.6	NA	NA
Marketing and sales	32.4	37.7	41.3	43.4	45.5	NA
Brokerage industries	40.6	47.4	55.3	61.0	NA	NA
Book publishing and printing	3.4	3.6	3.8	4.2	4.6	4.9
Libraries	2.1	NA	3.6	NA	NA	NA
Schooling	70.2	76.7	83.1	89.1*	98.8*	110.4*
Research and development	26.0	26.7	28.4	30.4*	32.0*	34.3*
Federal information institutions						
Census Bureau	0.1	0.1	0.1	0.1	0.1	0.1
National intelligence community	4.0+*	NA	NA	NA	7.0*	10.0+*
National Technical Information Service	0.0	0.0	0.0	0.0	0.0	0.0
Social Security Administration	1.0	1.2	1.3	1.4	1.9	2.2
County agents	0.3	0.4	0.4	0.5	0.5	0.6
Banking and credit	61.1	68.9	77.6	101.3	NA	NA
Insurance	92.6	103.5	113.8	123.6	NA	NA
Legal services	8.5	9.6	10.5	12.2	NA	NA
U. S. Gross National Product	977.1	1,054.9	1,158.0	1,294.9	1,406.9	1,493.9

*estimated

The general structure of this so-called post industrial society in contrast to the pre-industrial and industrial society are shown in Table 95 from Professor Daniel Bell. As near as we can tell, the implication of these changes in the work force has not been integrated into any aspect of the nation's school systems.

Some sense of the rapid growth of the information industries may be gotton from Table 96 which shows the gross revenues over a six-year interval.

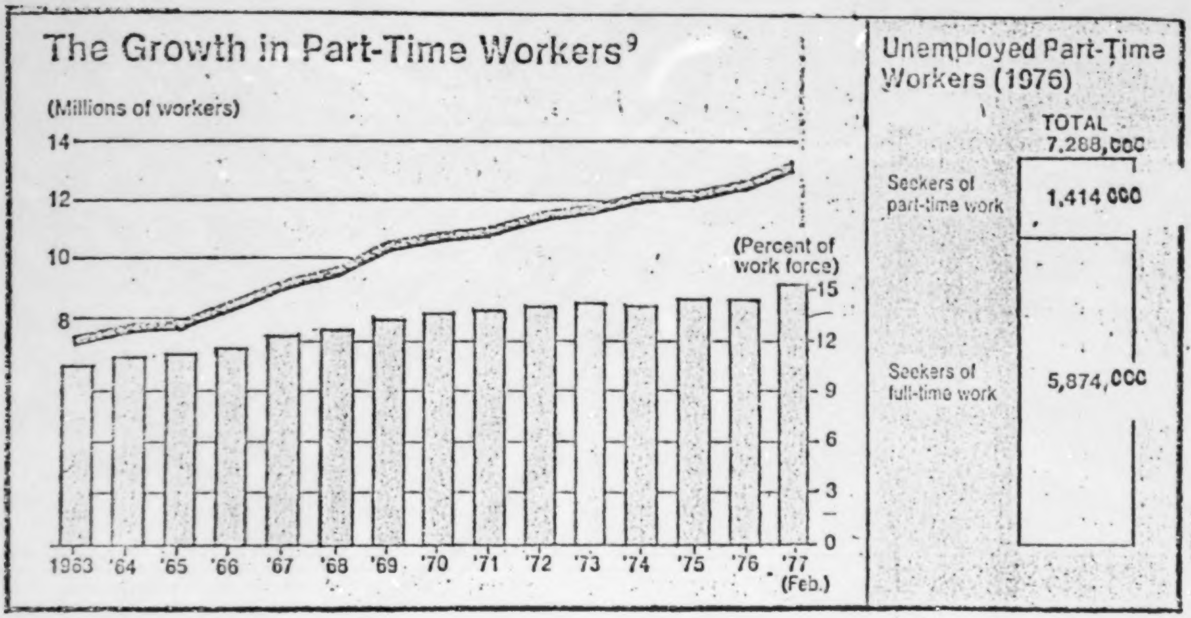
Part-Time Work

An interesting subsidiary development in the structure of the work force is the growth of part-time work. A recent Bureau of Labor Statistics report indicates that between 1963 and 1977, part-time workers have increased from less than 8 million to more than 13 million. They have grown to comprise about 16 percent of the work force (Figure 98).

Specifically, from the point of view of women and work, half of the 7 million women who joined the work force in the past decade entered as part-timers. Of the present 13 million part-time workers (in contrast to work force), women predominate by 2 to 1. Women outnumber men 7 to 1 in the 25-54 age group.

Among the 7,288,000 unemployed workers in 1976, 1,414,000 were only seeking part-time work.

Figure 98


The Growth in Part-Time Workers9
(Millions of workers)
14
12
10
8
(Percent of work force)
15
12
9
6
3
0
1963
'64
'65
'66
'67
'68
'69
'70
'71
'72
'73
'74
'75
'76
'77 (Feb.)
Unemployed Part-Time Workers (1976)
TOTAL 7,288,000
Seekers of part-time work
1,414 000
Seekers of full-time work
5,874,000

Flextime

A third element in the work force influencing the entry, work selection, occupational opportunity and family interactions is a growth of flextime and other alternative work schedules. In these employment schedules the whole work force is not locked to a fixed time interval or shift.

According to a recent study by R. M. Kanter, "flextime would seem especially critical for married women with family responsibilities and for single parents. It might also help those who like to care for the sick or elderly within the family rather than in outside institutions."[10]

Flextime schedules may permit more work force participation by women at their discretion, and hence, may at the same time, increase the demand for day care services. On the other hand, flextime may permit more informal familial, neighborhood or other non-institutionalized day care arrangements. This may reduce the demand for childcare services in schools or other formal institutions.

Section I -- INTRODUCTION

1. U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 643, Washington, D.C., January 1977, Figure 2.

2. Morrison, Peter A. "The Demographic Context of Educational Policy Planning," The Aspen Institute for Humanistic Studies, New York, 1976, p. 9.

3. Throughout this report in places too numerous to mention or cite, the Bureau of the Census, particularly through Dr. Larry Sutter, as point of contact, was especially valuable in checking data, updating information, and, in general, supplying and pointing out useful materials.

   In the same way the National Center for Education Statistics, as appropriate, performed the same function principally through the good offices of Dr. Mary Colladay, our point of contact with that agency.

Section II -- DEMOGRAPHIC TRENDS

1. This section has drawn very heavily on census data and on reports and discussions with Dr. Peter Morrison of the Rand Corporation and Dr. Harriet Fishlow of the University of California.

2. U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 632, July 1976.

3. U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 601, October 1975.

4. Census Bureau, Series P-25, No. 601.

5. Morrison, p. 4.

6. Census Bureau, Series P-20, No. 301, June 1975.

7. See ref. 6.

8. See ref. 6.

9. WHITE POPULATION-1860-69 to 1950-59 from Ansley J. Coal and Melvin Zelnick, New Estimates of Fertility and Population in the United States (Princeton: Princeton University Press, 1963), table 1; 1960-69 from National Center for Health Statistics, U.S. Public Health Service, Vital Statistics of the United States 1970,

Vol. I - Natality, table 1-2; 1970-74 from National Center for Health Statistics, U.S. Public Health Service, Monthly Vital Statistics Report, "Final Natality Statistics, 1974," table 1. BLACK POPULATION-1860-69 to 1965-69 from Ansley J. Coale and Norfleet W. Rives, "A Statistical Reconstruction of the Black Population of the United States 1880-1970: Estimates of True Numbers by Age and Sex, Birth Rates, and Total Fertility," Population Index, Vol. 39, No. 1, January, 1973, table 7; 1970-74 is from the same source as the White population.

10. See ref. 9.

11. 1920-1973 data: NCES, U.S. Public Health Service, Fertility Table for Birth Cohorts by Color: United States, 1917-1973, Tables 3b and 3c.
    1974 data: NCES, Monthly Vital Statistics Report, "Final Natality Statistics 1974," Table 3.

12. See ref. 11.

13. Kreps, Juanita M., ed., Women and the American Economy: A Look to the 1980's, Prentice-Hall, Inc., New Jersey, 1976, p. 48.

14. Census Bureau, Current Population Reports, Series P-20, No. 263, April 1974; Calculated from Tables 29 and 39.

15. Census Bureau, Current Population Reports, Series P-20, No. 301, June 1975.

16. Fishlow, Harriet, "Demography and Changing Enrollments," Unviersity of California, Berkeley, May 14, 1977.

17. Fishlow, see above.

18. Census Bureau, Current Population Reports, Series P-25, No. 601, October 1975, p. 30.

19. Census, see above, p. 28.

20. Census, see ref. 18, Tables 1 and P.

21. Fishlow, see ref. 16.

22. Census, see ref. 18, Tables 7-12 and D-2.

Section III - THE FAMILY

1. For general background, this section has drawn on the monograph by Hugh Carter and Paul Glick, *Marriage and Divorce: A Social and Economic Study*, Harvard University Press, 1976. More detailed information has been drawn from Juanita Kreps, *Women in the American Economy*, Prentice-Hall, New Jersey, 1976, and the monograph by Heather Ross and Isabel Sawhill, *Time of Transition*, The Urban Institute, 1975.

2. Norton, Arthur J., "Methodological Approach to Longitudinally Projecting the Population of Children Born in 1977 who may be Expected to Spend Some Meaningful Length of Time in a Single-Parent Situation Before Reaching the Age of 18 - and Related Discussion," Research Note, Population Division, U.S. Bureau of the Census, April 8, 1977.

3. Ross, Heather L. and Sawhill, Isabel V., *Time of Transition: The Growth of Families Headed by Women*, The Urban Institute, Washington, D.C. 1975, p. 20.

4. Glick, Paul C. and Norton, Arthur J., "Marital Instability: Past Present and Future," *Journal of Social Issues*, Vol. 32, No. 1, 1976.

5. U.S. Bureau of the Census, *Current Population Reports*, Series P-20, No. 296, March 1976.

6. U.S. Bureau of the Census, *Current Population Reports*, Series P-20, No. 306, "Marital Status and Living Arrangements: March 1976," U.S. Government Printing Office, Washington, D.C.

7. U.S. Bureau of the Census, *Current Population Reports*, Series P-20, No. 306; *1970 Census of Population*, Vol. II, 4B and *1960 Census of Population*, Vol. I, U.S. Summary, Table 185.

8. See above.

9. Census, see ref. 7.

10. Taeuber, Karl E. and Sweet, James A., "Family and Work: The Social Life Cycle of Women," from *Women and the American Economy: A Look to the 1980's*, Juanita M. Kreps, ed., Prentice-Hall, 1976.

11. Kreps, Juanita M., ed., *Women and the American Economy: A Look to the 1980's*, "Home Work, Market Work and the Allocation of Time," by J. Kreps and R. John Leaper, Prentice-Hall, Inc., New Jersey, 1976, p. 43.

12. Kreps, p. 43.

13. U.S. Department of Labor, Bureau of Labor Statistics, *Special Labor Force Report 174: Children of Working Mothers, March 1974*, p. 64.

14. Norton, Arthur J., see ref. 2

15. U.S. Bureau of the Census, *Current Population Reports*, Series P-20, No. 296, Table 4.

16. U.S. Department of Labor, Bureau of Labor Statistics, see ref. 13, p. 66.

17. Norton, Arthur J., see ref. 2.

18. Ross and Sawhill, *Time of Transition*, p. 2.

19. Ross and Sawhill, p. 186.

20. U.S. Bureau of the Census, *Current Population Reports*, Series P-23, No. 59.

21. Ross and Sawhill, p. 189.

22. National Academy of Sciences, *Toward a National Policy for Children and Families*, Washington, D.C. 1976, p. 19.

23. Ross and Sawhill, p. 85.

24. U.S. Bureau of the Census, *Current Population Reports*, Series P-60, No. 104, March 1974.

25. See above.

26. National Academy of Sciences, *Toward a National Policy for Children and Families*, p. 23.

27. U.S. Bureau of the Census, *Current Population Reports*, Series P-60, No. 93 (Advance Report).

28. Census Bureau, *Current Population Reports*, Series P-60, No. 105, Table 25, revised by M. Henson, 4/28/77.

29. U.S. Department of Health, Education and Welfare, "White Families Lead Welfare Rolls," April 16, 1976.

30. U.S. Bureau of the Census, *Characteristics of the Low-Income Population, 1973*, *Money Income and Poverty Status of Families and Persons in the U.S., 1974* and update.

31. Social Research Group, The George Washington University (Kurt Snapper, Harriet Barriga, Faye Baumarner, Charles Wagner), *The Status of Children*, Washington, D.C., 1975, p. 12.

32. See above.

33. U.S. Bureau of the Census, *Money Income and Poverty Status of Families and Persons in the United States: 1974 and 1975 Revisions* and *Current Population Survey*, March 1976.

34. U.S. Bureau of the Census, "Survey of Income and Education," 1975.

35. U.S. Bureau of the Census, "Survey of Income and Education," 1970.

36. U.S. Bureau of the Census, Dr. Larry Suter.

37. U.S. Bureau of the Census, *Current Population Surveys*, 1975.

38. Social Research Group, *The Status of Children*, p. 11, revised by Dr. Larry Suter, Census Bureau.

39. U.S. Bureau of the Census, "Survey of Income and Education," 1975.

40. Record, R.G., McKeown, Thomas and Edwards, J.H., "The Relation of Measured Intelligence to Birth Order and Maternal Age," *Ann. Hum. Genet.*, London, 1969, pp. 33-61.

41. U.S. Bureau of the Census, *Current Population Reports*, Series P-60, No. 100, "Household Money Income in 1974 and Selected Social and Economic Characteristics of Households."

42. See above.

43. See ref. 41.

44. National Center for Health Statistics, *Vital Statistics of the* United States, 1971: Vol. I - Natality, Tables 1-30 and NCHS annual issues, *Monthly Vital Statistics Report*, "Final Natality Statistics," 1972-74.

45. Florida Department of Health and Rehabilitative Services, Public Health Statistics Section.

Section IV -- WOMEN'S ENTRY INTO THE WORKING FORCE

1. This section draws extensively from the Kreps and Sawhill monographs cited below as well as from the 1975 Handbook on Women Workers, produced by the Women's Bureau of the U.S. Department of Labor, Bulletin No. 297.

2. Daniels, Arlene K., Project on the Status and Education of Women by the Association of American Colleges, the National Science Foundation and Arlene Kaplan Daniels, "A Survey of Research Concerns on Women's Issues," Association of American Colleges, Washington, D. C., 1975, p.10.

3. U. S. Department of Labor, Women's Bureau, 1975 Handbook on Women Workers, Bulletin No. 297, Washington, D. C., p.9.

4. Labor Department, Women's Bureau, p. 243.

5. See above, p. 244.

6. Kreps, Juanita M., ed., Women and the American Economy, A Look to the 1980's, Prentice-Hall, Inc., 1976, p.66, from Manpower Report of the President, April 1975

7. Labor Department, Women's Bureau, p. 13.

8. Kreps, p. 69.

9. Kreps, p. 67.

10. Labor Department, Women's Bureau, p. 100.

11. Women's Bureau, p. 23.

12. Women's Bureau, p. 103.

13. Women's Bureau, p. 124.

14. Women's Bureau, p. 16.

15. Social Research Group, The George Washington University, The Status of Children, Washington, D. C., 1975, p. 9.

16. See above, p.9.

17. Social Research Group, p. 10.

18. Women's Bureau, p. 66.

19. Kreps, p. 76.

20. Kreps, p. 54.

21. Kreps, p.54.

22. Women's Bureau, p.27.

23. Women's Bureau, p.22.

24. Hartmann, Heidi I., "Womens' Work in the United States," Current History, Vol. 70, No. 416, May 1976, p.229.

25. Morrison, Peter A., "The Growth of Multiworker Families," unpublished paper, Rand Corp.

26. Women's Bureau, p. 136.

27. Ross, Heather L. and Sawhill, Isabel V., Time of Transition: The Growth of Families Headed by Women, Urban Institute, Washington, D. C., 1975, p.77.

28. Ross and Sawhill, p.10.

29. U.S. Bureau of the Census, Current Population Reports, Special Studies, Series P.23, No. 54, U.S. Government Printing Office, Washington, D. C., 1975.

30. Morrison, Peter A., p.16.

31. Morrison, p.16.

32. Morrison, p.19.

33. Morrison, p.19.

Section V -- IMMIGRATION

1. This section draws principally on Census data and a special survey of language sponsored by the National Center for Education Statistics.

2. U.S. Immigration and Naturalization Service, 1975 Annual Report, Table 10.

3. U.S. Bureau of the Census, Current Population Reports, Series P-20, No. 267 and 279, Washington, D.C.

4. U.S. Bureau of the Census, Current Population Reports, Series P.26, No. 632, July 1976.

5. The World Almanac and Book of Facts 1976, Newspaper Enterprise Association, New York, New York.

6. National Center for Education Statistics, "July 1975 Survey of Languages," The Condition of Education, 1977 Edition, p.8.

7. NCES, p.8.

8. NCES, p.8.

9. NCES, p.9.

10. NCES, p.94.

11. NCES, p.206.

12. NCES, p.95.

13. NCES, p.96.

14. NCES, p.208.

15. NCES, p.97.

16. NCES, p.98.

17. U.S. Bureau of the Census, Current Population Reports, Series p.20, No. 313, Dec. 1976.

Section VI -- LOCAL MOBILITY AND INTERNAL MIGRATION

1. To a large extent this section draws from the work of Calvin Beale, U.S. Department of Agriculture; Larry Long, U.S. Bureau of the Census and Larry Ledebur of the Commerce Department.

2. Ledebur, Larry C., "The Dynamics of Change: The Urban-Rural Distribution of Work and Residence in the United States," The Research Review 1976, U.S. Department of Commerce, Washington, D.C., p. 12-24.

3. Beale, Calvin L. "A Further Look at Nonmetropolitan Population Growth Since 1970," Amer. J. Agr. Econ., December 1976, p. 953-58.

4. U.S. Bureau of the Census, Current Population Reports, Series P-20, No. 285, U.S. Government Printing Office, Washington, D. C., Oct. 1975.

5. Beale, Calvin L., see ref. 3.

6. Ledebur, Larry C., see ref. 2., p.17.

7. Ledebur, Larry, p.20.

8. Ledebur, Larry, p.22.

9. Domestic Council of the White House, "The Changing Issues for National Growth: 1976 Report on National Growth and Development," HUD-386-2-CPD, February 1976, p.27.

10. Domestic Council, p.28.

11. Domestic Council, p.29.

12. Domestic Council, p.23.

13. Domestic Council, p.23.

14. National Center for Education Statistics, *The Condition of Education 1976 Edition*, U.S. Government Printing Office, Washington, D.C., 1976, p. 155.

15. NCES, above, p.157.

16. Morrison, Peter A. "The Demographic Context of Educational Policy Planning," Aspen Institute for Humanistic Studies, New York, 1976, p.27.

17. Farrell, William E., "Influx of Population Down in Urban Areas," New York Times, June 30, 1975, p.17.

18. U.S. Bureau of the Census, *Current Population Reports*.

19. Personal communication from Dr. Calvin Beale, U.S. Department of Agriculture.

20. Long, Larry H. "Does Migration Interfere with Children's Progress in Schools?" (Revised version of a paper presented at the 1973 annual meeting of the American Sociological Association, August 1973, New York city), *Sociology of Education*, V. 48, Summer 1975, p.367-381.

21. Long, Larry H., "How the Racial Composition of Cities Change," *Land Economics*, LI 3, August 1975, p. 261.

22. Long, p.263.

23. Long, p.264.

24. Shannon, L. and M., *Minority Migrants in the Urban Community*, Sage Publ., 1973, p.328.

25. Orfield, Gary, "White Flight Research," *The Educational Forum*, v. 40., May 1976, p.526.

26. U.S. Bureau of the Census, *1970 Census of Population*, "Lifetime and Recent Migration" Study, Table 6.

27. Orfield, p.529.

Section VII -- DECLINING ENROLLMENTS

1. This section largely draws on a series of monographs and studies sponsored by the National Institute of Education as well as on the data collected by the National Center for Education Statistics.

2. The Minnesota State Planning Commission, "Report of the Commission on Minnesota's Future," St. Paul, Minn., January 1977, p. 39.

3. County Map of the State of Minnesota, American Map Co., Inc., New York, N.Y., No. 17582-A.

4. National Center for Education Statistics, The Condition of Education, 1976 Edition, U.S. Government Printing Office, Washington, D.C.

5. See above.

6. The National Education Association, "Estimates of School Statistics, 1971-72."

7. Prepared by the Education Finance Center, Education Commission of the States.

8. See above.

9. Goettel, Robert J., "Declining Enrollments," Section of The Imperative of Leadership, A Report on Declining Enrollments, Vol. II, No. 1, National Association of State Boards of Education, Denver, Colo. 1976.

10. See above.

11. Council of the Great City Schools data, Washington, D. C., Jan. 1976.

12. See Above.

13. See ref. 11.

14. See ref. 11.

15. See ref. 11.

16. Jack Leppert and Dorothy Routh, An Analysis of State School Finance Systems as Related to Declining Enrollments, prepared under contract with the National Institute of Education, MGT of America, Inc. Tallahassee, Fla., September, 1976.

17. National Center for Education Statistics Projections, 1976, U.S. Department of Health, Education and Welfare.

18. Morrison, Peter A., "The Demographic Context of Educational Policy Planning," the Aspen Institute for Humansitic Studies, 1976.

19. National Center for Education Statistics, The Condition of Education, 1976 Edition, p. 129.

20. Callahan, John J., Wilken, William H., Boonin, Robert, Declining Enrollment: The Cloud and Its Silver Lining, Legislators' Education Action Project, National Conference of State Legislatures, Prepared under contract for The National Institute of Education, Division of School Finance and Organization, January 31, 1977.

21. See above.

22. See ref. 20.

23. Mueller, Van D., "The Educational Policy Setting and Fluctuating School Enrollments," A paper presented at a Symposium on Fluctuating Enrollments: Implications for Manpower Planning and Resource Allocation, Session 13-14, 1977 Annual Meeting, American Research Association, New York City, April 6, 1977.

24. Personal communication, Dr. Harriet Fishlow, University of California, Berkeley.

25. Florida, University of, College of Education, Social Forecasting and Educational Planning, Progress Report No. 1, January 1, 1977.

Section VIII -- RESPONSES TO DECLINE

1. This section, particularly that portion dealing with day care, draws as background on the work of Meredith Larson, Stanford Research Institute and the George Washington University, monograph on Status of Children, 1975, produced by the Social Research Group of GWU.

2. U. S. Bureau of the Census, Current Population Reports, Series P-20, No. 298, U.S. Government Printing Office, Washington, D.C., October, 1976.

3. Census Bureau, see above.

4. See ref. 2.

5. Larson, Meredith A., Federal Policy for Preschool Services: Assumptions and Evidence, Educational Policy Research Center, SRI, May 1975, p.28.

   See also:
   Suter, Larry E. and Waite, Linda J., "Worker, Housewife, Mother: Role Decisions of Young Women," Chapter II, Birth Expectations and Working Plans of Young Women: Changes in Role Choices, U.S. Department of Commerce, Bureau of the Census, Washington, D.C.

Shortlidge, Richard L., Waite, Linda J. and Suter, Larry E. "Changes in Child Care Arrangements of Working Women: 1965-1971," reprinted from the 1974 Business and Economic Statistics Section Proceedings of the American Statistical Association, p. 209.

Waite, Linda J. and Stolzenberg, Ross M., "Intended Childbearing and Labor Force Participation of Young Women: Insights from Nonrecursive Models, "American Sociological Review, 1976, Vol. 41 (April), p. 235-252.

6. National Center for Educational Statistics, The Condition of Education, 1977 Edition, p. 28.

7. U.S. Bureau of the Census, Current Population Survey, October 1967-1976.

8. See Above.

9. NCES, The Condition of Education, p. 29.

10. U.S. Bureau of the Census, Dr. Larry Suter.

11. Personal communication from Merdith Larson.

12. Larson, Meredith A., see ref. 5, p. 33.

13. Larson, p. 37.

14. Larson, p. 44.

15. Larson, p. 39.

16. National Academy of Science, Toward A National Policy for Children and Families, NAS, Washington, D.C. 1976, p.121.

17. See above, p. 128.

18. See above, p. 130.

19. Daniels, Arlene Kaplan, "A Survey of Research Concerns on Women's Issues." Project on the Status and Education of Women, ed. A.K. Daniels, Association of American Colleges, May 1975.

20. Personal communication from R. B. Zajonc.

21. Broman, Sarah H., Nichols, Paul L. and Kennedy, Wallace A., Preschool IQ: Prenatal and Early Developmental Correlates, L. Erlbaum Assoc., publ., Hillsdale, N.J., 1975.

22. Personal communication, R.B. Zajonc.

23. Zajonc, R.B., "Family Configuration and Intelligence," Science, April 16, 1976, p. 228.

24. Wm, Paul P.C., "The Effects of a Peer Tutorial Program On Academic Achievement and Self Concept of Low Achieving High School Mathematics Students," Dissertation, Florida State University, 1973.

    Duff, Ruth E., "Effects of Pupil-Tutoring on Self-Perception and Academic Achievement of Primary Grade Tutors and Tutees," Dissertation, Southern Illinois University, 1973.

    Richer, Howard M., "Peer Teaching as a Facilitator of Learning: Using Conservation of Substance as a Measure," Dissertation, UCLA, 1973.

25. Zajonc, R.B., p. 228.

26. Zajonc, R.B., p. 234.

27. Zajonc, R.B., p. 233.

28. Claudy, John G., "Cognitive Characteristics, Family Size, and Birth Order," Submitted for publication, AIR, Palo Alto, Calif., 1977.

29. Tough, Allen, The Adults' Learning Projects: A Fresh Approach to Theory and Practice in Adult Learning, Ontario Institute for Studies in Education. 1971.

Section IX -- SOME DATA ON SCHOOLS AND STUDENTS

1. National Center for Education Statistics, The Condition of Education, 1977 Edition, p. 42.

2. See above, p. 43.

3. See ref. 1, p. 44.

4. U.S. Department of Health, Education and Welfare, NCES, Fall Statistics of Public Schools, 1976, p.236.

5. NCES, Statistics of Public Elementary and Secondary Day Schools, Fall 1975, p. 238.

6. See above, p. 239.

7. NCES, Statistics of Public Schools, Fall 1965 and Statistics of Public Elementary and Secondary Day Schools, Fall 1975.

8. See above.

9. NCES, The Condition of Education, 1977 Edition, p. 41.

10. See above.

11. NCES/HEW, Education Directory for selected years.

12. Comptroller General of the United States, Report to the Congress, "Bilingual Education: An Unmet Need," (Office of Education), MWD-76-25, May 19, 1976.

13. NCES, The Condition of Education, 1977 Edition, p.81

14. NCES, Statistics of Public Elementary and Secondary Day Schools, Fall 1976 and Statistics of Public Schools.

15. See above.

Section X. FLIGHT TO THE PRIVATE SCHOOL

1. Erickson, Donald; Nault, Richard L.; and Cooper, Bruce S., Recent Enrollment Trends in U.S. Non-Public Schools: Final Report to the National Institute of Education, HEW, Feb. 1977.

2. See above.

3. See above, p.7.

4. See ref.1, p. 542.

5. NCES, The Condition of Education, 1977 Edition, Vol. 3., p. 74, Chart 4.02.

6. NCES, p. 74, chart 4.03.

7. NCES, p. 75, chart 4.04.

8. NCES, p. 76, chart 4.05.

9. NCES, p. 77, chart 4.06.

10. NCES, p. 78, chart 4.08.

12. NCES, p. 78, chart 4.09.

13. NCES, p.79, chart 4.10.

14. Giles, Michael W.; Gatlin, Douglas S. and Cataldo, Everett F. Executive Summary, Determinants of Resegragation: Compliance/Rejection Behavior and Policy Alternatives, National Science Foundation, April 26, 1976.

15. See above, Table 2, p.8.

16. See ref. 14, p. 14-18.

17. U.S. Commission on Civil Rights, "Reviewing a Decade of School Desegregation, 1966-1975," Washington, D.C., January 1977, p.6-7.

18. Civil Rights Commision Study, p. 75.

19. Civil Rights Commission Study, p. 78.

Section XI -- DECLINE IN THE AGE OF ONSET OF PUBERTY

1. Teenage childbearing is a special concern of Dr. Wendy Baldwin of the Center for Populations Research, National Institutes of Child Health and Development.

   She has authored a very useful Population Bulletin: "Adolescent Pregnancy and Childbearing: Growing Concerns for Americans." She has also produced a summary memorandum on teenage pregancy May 27, 1976 and is currently working on a paper, "Demographic Issues of Early Adolescence."

   A continuing source of information on teenage sexual behavior is the journal, Family Planning Perspectives published by Planned Parenthood Federation of America, Inc.

2. Handler, Philip, Editor, Biology and The Future Of Man, Oxford University Press, New York, 1970, p. 705.

3. Baldwin, Wendy H., "Adolescent Pregnancy and Childbearing: Growing Concerns for Americans," Population Bulletin, Vol. 31, No. 2, Population Reference Bureau, Washington, D.C., 1976

4. Senate Committee on Labor and Public Welfare, U.S. Congress, School-Age Mother and Child Health Act, 1975, S. 2538, November 4, 1975, p. 373.

5. Kantner, John F. and Zelnick, Melvin, "Sexual and Contraceptive Experience of Young Unmarried Women in the United States, 1976 and 1971, Family Planning Perspectives, Vol. 9, No. 2, March-April, 1977, p.56.

6. Kantner and Zelnick, p. 56.

7. Bernard, Jesse, "Adolescence and Socialization for Motherhood," Adolescence in the Life Cycle: Psychological Change and Social Context, S. Dragastin and Glen H. Elder, Jr., editors, John Wiley and Sons, Inc., 1975.

8. Presser, H.B. "Unintended Births Place Teenage Mothers at High Risk of Dropout, Unemployment, Dependency," Digest, Family Planning Perspectives, Vol. 8, No. 4, July/August 1976, p. 177

9. Furstenberg, Frank F., "The Social Consequences of Teenage Parenthood," Family Planning Perspectives, Vo. 8, No. 4, July/August 1976, p. 148-164.

Section XII. SOME NON-DEMOGRAPHIC VARIABLES INTERACTING WITH DEMOGRAPHY

1. Morrison, Peter A., "The Growth of Multiworker Familiies," unpublished paper, Rand Corporation.

2. National Center for Education Statistics, Statistics of State School Systems.

3. See above.

4. Personal communication, Todd La Port, University of California at Berkeley.

5. Parker, Edwin B. and Porat, Marc, analysis of U.S. Bureau of Labor Statistics data, Social Implications of Computer/Telecommunications Systems. / Report No. 16, Program in Information Technology and Telecommunications, Center for Interdisciplinary Research, Stanford University, February 1975.

6. See above.

7. Bell, Daniel, "Welcome to the Post-Industrial Society," Physics Today, v. 29, February 1976, p. 47.

8. Parker and Porat, see ref. 6.

9. Flint, Jerry, "Growing Part-Time Work Force Has Major Impact on Economy," New York Times article, April 12,1977, p. 1, col. 5.

10. Kanter, Rosabeth Moss, Work and Family in the United States: A Critical Review and Agenda for Research and Policy, Russell Sage Foundation, 1977, p. 94.